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EXECUTIVE SUMMARY

In exercising its responsibility for overall administration of the Food Stamp Program, the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture continually seeks ways to improve the program's efficiency and integrity. For the past several years, FNS has been exploring the possibility of achieving such improvements by modifying the system for issuing food stamp benefits. One modification would replace paper food stamp coupons with an electronic benefit transfer (EBT) system.

As part of this exploration, FNS funded a demonstration of an EBT system in Reading, Pennsylvania. That system records each household's benefits in an "account" in a central computer file. The household has a plastic, magnetic-stripe benefit card with the account number and other identifying information encoded in the magnetic stripe. The system also involves terminals at the checkout counters of participating retailers in Reading. In an EBT purchase, the terminal reads the recipient's card and establishes an on-line connection with the central computer, which checks the recipient's account balance and then debits the recipient account and credits the retailer account accordingly.

In addition to funding the demonstration itself, FNS contracted with Abt Associates Inc. to evaluate the demonstration. The evaluation has resulted in a series of reports examining the development and implementation of the EBT system, the system's performance, and its impacts on administrative cost, program integrity, and recipients, retailers, and financial institutions that participate in the Food Stamp Program. The evaluation findings are in many respects promising.

Further demonstrations will be needed to resolve some of the unanswered questions from Reading, particularly the question of whether an EBT system can operate as economically as the current coupon system. If such questions are resolved positively, FNS will seriously consider implementing EBT systems on a non-demonstration basis.

In considering either demonstration or non-demonstration applications, FNS must decide what types of EBT systems and what system features are acceptable to the Food Stamp Program. These decisions will be incorporated in guidelines for demonstrations, and formalized as regulations for non-demon-

strations. This report identifies some of the issues that must be decided and discusses alternative regulatory approaches.

The report draws upon the experience of the Reading demonstration, but attempts to address the above questions in the broader context of possible alternative EBT systems. For example, a key option in EBT system design is the choice between "on-line" and "off-line" systems. On-line systems, which Reading exemplifies, involve communication between the store terminal and the central computer before a food stamp purchase is authorized. In off-line systems, the benefit account resides on the recipient's card rather than a central computer file, so the transaction authorization is based solely on the interaction between the card and the store terminal. The report considers issues raised by both types of systems, but because Reading's is the only EBT system actually implemented to date, the discussion focuses primarily on that type of system.

Issues in Establishing Regulations

Two types of regulatory changes will be needed for EBT systems to be implemented on a non-demonstration basis. First, a number of changes are needed to alter language that currently prohibits or does not envision EBT systems. For example, current regulations often use the word "coupons" to refer to food stamp benefits, and this usage would have to be broadened. Second and more importantly, many specific requirements for system functions and performance will have to be included in the regulations to make sure that an EBT system operates in a manner acceptable to the program.

Functional requirements. Regulations will probably need to specify the basic functions that a system must perform to be considered an acceptable electronic benefit transfer system. These include:

- Providing benefit allotments to recipients;
- Allowing recipients to buy authorized items with their benefits;
- Crediting retailers for benefits they accept;
- Ensuring fiscal accountability; and
- Providing management information.

Regulations for each function will establish some detail about specific actions that must be carried out to support the function or situations in which it must be performed. For example, they will probably identify different types of allotments the system must handle, specify when and where recipients must be able to use their benefits, delimit the requirements for providing transaction and balance information to recipients and deposit information to retailers, and define the types of reconciliations the system must perform.

In many instances, policy decisions are required before the regulations can be framed. For example,

- How many of the authorized stores within an EBT area must be equipped for EBT transactions?
- Under what circumstances must recipients be allowed to convert EBT benefits to coupons?
- Under what circumstances will lost or stolen benefits be replaced (for example, what happens if an outsider penetrates a State-maintained system and causes unauthorized debits to a recipient's account)?
- Must off-line systems reconcile recipients' issuances against the benefits they redeem (the Reading system contains this feature, but the coupon system does not)?

Design and performance requirements. Beyond the issues of what an EBT system must do lie questions about system design and performance standards -- i.e., requirements concerning how, and how well, the system must perform its functions.

Regulations in this area have somewhat different objectives from the functional requirements. They seek to protect program integrity, to promote compatibility among EBT systems and with analogous commercial payment systems, to guard recipient and retailer interests, and to ensure cost-effectiveness. In framing regulations to achieve these objectives, the key question is, how much is enough? In what areas should regulations enforce compatibility, security, etc., and what areas should be left to States to judge in designing their systems?

The main areas in which regulation might be considered are:

- Characteristics of system components, which includes the choice between on- and off-line approaches, the choice of

card technology, and the desired level of conformity with industry standards.

- Security measures, including physical access controls, communications access controls, controls on manually authorized purchases, and administrative and operational procedures.
- Performance characteristics, such as processing times, system reliability, and system capacity.
- User convenience, in particular the degree to which normal issuance and redemption procedures are easy and understandable for recipients and retailers.

Delegation of EBT-related responsibilities. Although States are responsible for many aspects of Food Stamp Program administration, current regulations give them the authority to delegate some of those responsibilities (e.g., to issuance agents) and establish conditions governing the delegation. EBT systems open several new potential forms of delegation, including the contracting out of system design and operations and integrating EBT systems with commercial point-of-sale networks ("piggybacking"). Regulations will be needed to:

- Define allowable types of delegation, with particular attention to institutional arrangements that might result in conflict of interest or upset a competitive balance among private firms.
- Define States' liabilities in the context of various financial losses that may occur in an EBT system, and specify what liabilities are to be passed on to organizations to which the State delegates EBT responsibilities.
- Specify allowable financial arrangements, which might include charging commercial institutions for allowing them to use the EBT system (reverse piggybacking) and cost-sharing with retailers participating in the system.
- Specify required procurement procedures, and determine whether EBT systems shall be covered under present regulations providing enhanced federal reimbursement for development of automated data processing systems.

CHAPTER 1

INTRODUCTION

The Food Stamp Program provides financial assistance to low-income households to allow them to purchase food. The program currently relies on paper coupons as the medium for delivering benefits to eligible households. Although benefits are determined in terms of explicit dollar values, coupons are used to " earmark " the benefits so they can be used to purchase only authorized items.

The Food and Nutrition Service (FNS) of the U.S. Department of Agriculture, which has overall responsibility for administering the Food Stamp Program, continually seeks ways to enhance the program's efficiency and integrity. As part of this mission, FNS has explored the possibility of using electronic funds transfer technology to replace the paper food stamp coupon. This exploration has already involved formal feasibility studies as well as a demonstration and evaluation of an electronic benefit transfer (EBT) system in Reading, Pennsylvania.¹

The results thus far offer promise for the future of EBT systems. FNS experience indicates EBT is technically feasible and preferable to paper coupons from many points of view. Some unanswered questions remain, however. Among the most important is whether or not an EBT system can be cost-competitive with the paper system. There is also a question of whether or not some untested alternative technologies may be preferable to electronic alternatives.

¹See, for example:

Report on the Feasibility of an Electronic Benefit Transfer System for the Food Stamp Program, Silver Spring, Maryland: Birch & Davis Associates Inc. and The Orkand Corporation, March 1982.

John A. Kirlin, Developing an Electronic Benefit Transfer System for the Food Stamp Program, Cambridge, Massachusetts: Abt Associates Inc., August 1985.

John A. Kirlin and William L. Hamilton, Performance Issues in an Electronic Benefit Transfer System for the Food Stamp Program, Cambridge, Massachusetts: Abt Associates Inc., February 1987.

William L. Hamilton et al., The Impact of an Electronic Benefit Transfer System in the Food Stamp Program, Cambridge, Massachusetts: Abt Associates Inc., May 1987.

Any routine--that is, non-demonstration--implementation of the EBT concept will require changes in program regulations. Existing program regulations assume that food stamp benefits virtually always take the form of paper coupons.¹ The regulations allow and States have implemented several different kinds of "issuance systems," but all are designed to place paper coupons in recipients' hands.

The regulations could be superficially modified to allow EBT systems. Benefits could be defined as either coupons or electronic benefits, and a brief description of EBT system alternatives could be added to the current list of issuance systems. Language throughout the regulations could be altered simply by making changes such as substituting "benefits" for "coupons."

Such superficial modification would clearly be inconsistent with the character of current regulations, however. The current regulations contain substantial detail on both general principles and specific procedures for issuing food stamp benefits.² Moreover, it would be a risky approach: the Reading experience has demonstrated the difficulty and complexity of fashioning an acceptable EBT system. EBT system implementation involves many pitfalls that could impose high costs or defeat the Food Stamp Program's basic goal of delivering benefits to eligible households.

It is preferable, then, that regulations be carefully crafted to identify specific requirements for an EBT system in some areas and at least general guidance at other points. Regulations will have to specify the functions that an acceptable system must perform and provide standards for system design and performance. They must also define the extent to which a State can delegate its responsibility for issuing benefits to other parties, such as contractors or operators of commercial POS systems. In all of these areas, regulations will have to be framed with an eye to their impact on an EBT sys-

¹The only exceptions are in the Commonwealth of Puerto Rico and certain demonstration projects for elderly SSI recipients, where non-earmarked cash benefits are provided.

²Regulations for the Food Stamp Program are found in the Code of Federal Regulations, Title 7 (Agriculture), Subtitle B (Regulations of the Department of Agriculture), Chapter II (Food and Nutrition Service), Subchapter C (Food Stamp and Food Distribution Program), Sections 271-285.

tem's fiscal integrity, its cost-effectiveness, its compliance with other federal laws and regulations, its compatibility with commercial POS systems operating in the same environment, and its impact on the recipients and retailers who will be the system's primary users.

This report seeks to identify the types of federal regulations that may be desirable if States are to implement non-demonstration EBT systems. It describes the nature and purpose of possible regulations, and discusses the reasons why particular requirements might (or might not) be desirable elements of national regulations.

Several approaches to regulation exist. For example, some regulations require a particular outcome, such as the accurate delivery of benefits; others require a particular procedure, such as the type of report a State must provide to FNS. Regulations may be quite specific about what an EBT system must accomplish or look like, or they may simply require States to submit plans for EBT systems, which FNS will review and approve. Each of these approaches has particular advantages and disadvantages, and existing program regulations include a combination of all these approaches.

For the most part, this report discusses potential EBT regulations as though each might be specified in the federal code. We take this approach in order to facilitate a full discussion of the issues, but in reality FNS will probably want to incorporate some points in regulation and others in guidelines. For example, given the existence of acceptable design alternatives, the more flexible guidelines approach is likely to be most workable. Where one approach appears more feasible than the other, a recommendation is made.

One important qualification is in order. This discussion does not attempt to frame specific regulatory language, nor to identify specific places in the existing regulations where requirements could be modified or inserted. Appendix A outlines the current Food Stamp Program regulations, noting sections that contain language inconsistent with an EBT system or principles that may have implications for a system, either directly or by analogy.

As background to the discussion of regulations, the remainder of this chapter briefly reviews the basic characteristics of the paper coupon and the electronic benefit transfer systems.

The coupon system. The paper food stamp coupon is the central element of the coupon system. FNS contracts to have coupons printed in denominations of \$1, \$5, and \$10. They are packaged in books with total values of \$2, \$7, \$10, \$40, \$50, and \$65.

Each month, an eligible household receives an allotment of coupons. The household may use the coupons to purchase authorized items at any participating food retail establishment. The household may receive no more than 99 cents in cash change from a coupon purchase.

To redeem coupons for their dollar value, retailers endorse the coupons, fill out a form, and deposit the coupons in their local banks. The banks credit the retailers, then pass the coupons on to a Federal Reserve Bank, which credits the retailers and debits the appropriate Department of Agriculture account.

The major variations in the coupon system concern the procedures for getting the coupons to households each month. Each State is responsible for designing and implementing its own issuance procedures, within regulatory guidelines defining five major system types:

- ATP system. Recipients get an Authorization-to-Participate document in the mail each month, stating the amount of their allotment. They use the ATP and an identification card at issuance offices to obtain their coupons.
- Direct mail. Food stamp coupons are mailed directly to recipients each month by regular or certified mail.
- On-line. Recipients present identification cards to an issuance agent. The agent verifies the authorization through direct access to a computerized allotment file and gives the recipients their coupons.
- Direct delivery. ATPs are mailed to issuance agents. Recipients present their identification cards, sign the ATP, and receive coupons.
- HIR system. A paper Household Issuance Record is maintained at an issuance office (usually the local welfare office). Recipients present their identification cards, sign the HIR, and receive coupons.

The Reading EBT system. In the Reading EBT system, a household's benefits reside in an "account" maintained in a central computer facility. Instead of sending out ATPs, the State sends allotments electronically to be added to the recipient accounts.

To use the benefits, each household has a magnetic-stripe card and participating retailers have terminals at their checkout counters. The terminal reads the card and establishes an on-line connection with the central computer, which checks to make sure the recipient's account has enough benefits to cover the purchase, then debits the recipient's account and credits the grocer's.

At the end of each day, the central computer totals the day's transactions to determine the amount of benefits each retailer has accepted. An electronic funds transfer process begins, resulting in deposits to grocers' bank accounts the next day.

Other possible EBT systems. Although the Reading system is the only EBT system to be implemented to date, future systems might be developed with significantly different designs. These alternative designs must be considered, to the extent that they can be anticipated, in formulating regulations or in contemplating the operational implications of EBT systems.

The most important design differences lie between "on-line" and "off-line" EBT systems. The Reading system is on-line -- that is, each electronic purchase must involve an immediate, "real time" communication with the central computer for authorization.

Off-line systems, in contrast, authorize purchases without any immediate external communication. To accomplish this, the recipient's benefit account would probably reside in the benefit card rather than the central computer. Each new allotment would be electronically added to the recipient's card rather than to the central account. To make a purchase, the retailer's terminal would read the account balance on the recipient's card, change the balance to reflect the purchase, and store a record of the purchase in a file kept in the terminal. The stored purchase records would be totaled daily to initiate electronic funds transfers to the grocers.

The above descriptions assume that recipients in EBT systems always redeem their benefits by means of electronic point-of-sale (POS) transac-

tions. Another variation on the theme, however, would use electronic transactions only to deliver coupons. An automatic coupon dispenser (ACD) would issue coupons to recipients, through either on-line or off-line transactions. Recipients and retailers would then redeem coupons as in the current system. A single EBT system could combine both electronic and coupon approaches, allowing the recipient to choose either ACD or POS transactions.

A final group of major design alternatives concerns the integration of EBT systems with commercial electronic funds transfer networks, or "piggybacking." Many commercial POS systems look very similar to an EBT system: a consumer card interacts with a retailer terminal to produce either an on-line or an off-line authorization for a purchase, and electronic funds transfers move funds from the consumer's account to the retailer's. EBT systems might therefore be designed to piggyback on existing commercial POS systems, or conversely. Such integration could occur with any of the EBT configurations described above.

CHAPTER TWO

FUNCTIONS AN EBT SYSTEM MUST PERFORM

The first task in drafting new regulations will be to specify what an EBT system must do -- that is, what functions it must perform to meet the Food Stamp Program's fundamental goal of providing benefits to eligible households.

The most difficult aspect of specifying functional requirements will be to frame the requirements in a way that encompasses the many possible designs of an acceptable EBT system. Although the Reading system's design provides a good baseline, it performs some actions that another system might not perform, and omits some that another system might include. The largest variations are likely to exist between on-line and off-line systems, and while regulations might restrict the use of off-line systems, this paper takes the approach of assuming that regulations might have to apply to both types of system.

In many instances, a policy decision will be needed before an appropriate regulation can be framed. Sometimes this is a decision about how an EBT system should operate, such as whether stolen benefits should be replaced. Often it is a decision about whether a particular requirement is really needed or it is more appropriate to leave the matter open to States' judgements. Both types of issue are raised in the text.

This chapter discusses in turn five basic functions of an EBT system:

- Providing benefit allotments to recipients;
- Allowing recipients to use their benefits;
- Crediting retailers for benefits they accept;
- Ensuring fiscal accountability; and
- Providing management information.

2.1 PROVIDE BENEFIT ALLOTMENTS TO RECIPIENTS

The issuance system must provide benefit allotments to recipients.

It will be important for the regulations to define the "provision of benefit allotments" carefully. What it means for recipients to "have" their benefits -- i.e., for the benefit allotment to have been provided -- is much

different in the coupon and electronic systems. Recipients have their benefits in the coupon system when they have taken physical possession of their allotment of coupons. In electronic systems, recipients have their benefits when the allotment amount has been credited to an account to which the recipients have access and which can be used to obtain food. The account will reside in a central computer in an on-line system, or in an access device in the recipient's possession in an off-line system.

In a system that includes automatic coupon dispensing, as in other EBT systems, recipients are deemed to have their benefit allotment when their account has been credited (assuming the recipients immediately have the necessary access). They may subsequently choose to convert some or all of their allotment into coupons.

It may be desirable for regulations to identify separately three types of allotment that must be provided, both because they are subject to somewhat different regulations and because they pose differing system design requirements:

- Regular monthly allotment, which is subject to a general requirement that each household must get benefits on about the same day every month, although different households may be scheduled for different days. (Historically, regulations have limited the staggering period to the first half of the month, but the Food Security Act of 1985 provides for staggering throughout the whole month.
- Expedited service allotment, which must generally be delivered within 5 or 7 days of the application (Section 273.2(i)); and
- Other allotments, which may occur at any time throughout the month.

Required system actions. Electronic systems will generally carry out two actions in order to provide benefits. They will give recipients an access device, most likely a card of some sort, and they will credit an account. There are several variations on this theme, however. For example, an off-line system might use a card containing allotments for a full certification period. Each month's allotment would be "released" by a process that would involve inserting the card in the reader of a special terminal, having the terminal check the date and determine that the account was still active, and then having the terminal write a special code onto the card.

Given such variations, it is very difficult to construct regulations that would require the two actions to be performed, and at the same time use language that readily applies to all potential system designs. Thus it does not appear desirable for regulations to be more specific than the general requirement to provide allotments of the three specified types. Specific procedures for meeting the requirements could be subject to FNS approval as part of an EBT system plan.

Lost, stolen and damaged cards. Current regulations require States to replace lost or stolen Authorization to Participate documents (ATPs) and mailed coupons that do not get to the recipient (in mail issuance systems). The principle here is that the State is responsible for making sure that recipients have the opportunity to take possession of their benefits. The State may not replace coupons that recipients lose or have stolen from their possession. However, damaged coupons must be replaced, on the principle that recipients must have the opportunity to use benefits they have received as long as it is clear that the benefits have not already been used. Coupons are also replaced in certain household disaster situations.

Equivalent EBT regulations may require States to replace any lost, stolen, or damaged benefit cards, provided that the replacement does not constitute replacement of benefits that were in the recipient's possession and that may still be used (or may already have been used). Rules concerning benefit replacement for household disasters would presumably apply as in the coupon system.

The Reading system incorporates three key principles in its replacement procedures:

- Lost, stolen, or damaged cards are replaced immediately when the recipient reports the problem;
- If a loss or theft results in any debits to the recipient's benefit account, those benefits are not replaced;¹ and

¹It is not likely that this principle would be applied if the loss could be attributed to EBT system operations (e.g., an EBT Center employee draining benefits from client accounts). The Reading system did not have to contend with such an incident, however.

- Any benefits remaining in the account when the loss, theft, or damage is reported are made available to the recipient through the replacement card.

These principles cannot be directly applied in off-line systems because the benefit account resides on the card itself. When a recipient reports a card loss or theft, the agency will not know how much of the benefit has already been used, and may have no means of preventing future use of the benefits.¹ For comparability with the coupon system, then, regulations could require States with off-line EBT systems to replace lost and stolen cards, but not place any benefits on the cards until the next issuance that would normally occur. Damaged cards would be handled similarly unless the remaining balance could be determined, in which case those benefits would be immediately placed on the new card.

These principles conflict to some degree with the spirit of the federal regulations governing electronic funds transfers (Regulation E), which place fixed dollar limits on the consumer's liability in the event of lost or stolen cards.² The USDA's General Counsel ruled in the context of the Reading demonstration, however, that Regulation E did not apply to an electronic benefit transfer system.

Whether or not comparable rules should be adopted seems at this point to be a policy decision. There are two arguments for comparability with Regulation E. First, the regulation may establish a sufficiently general precedent for EFT and POS systems that recipients have a reasonable right to expect to be treated similarly by an EBT system. Second, an EBT system that is integrated with a commercial POS system may have to adopt Regulation E conventions to be operationally compatible. The counter-arguments include comparability with the coupon system and the idea that the monthly issuance process in the Food Stamp Program provides a reasonable upper limit on the

¹This depends on what security features are designed into the system. For example, a "hot list" of cards reported lost and stolen might be

recipient's liability--that is, a household's maximum does not exceed one month's allotment, assuming recipients use all their allotment each month.

Training recipients. Any electronic system will represent a substantially new experience for most recipients. The Reading system therefore includes a relatively extensive training session for recipients as they are issued their cards. The head of household, and sometimes another household member or an authorized representative, participates in a one-hour training session including a video presentation and hands-on opportunity to practice using the EBT card. Given the relatively small number of recipient problems in Reading, it is clear that the training was at least sufficient, and perhaps more than necessary. Anecdotal evidence suggests that recipients needed relatively little training once the system had been established and running for a few months; presumably the diminished need for training stemmed from a general understanding in the community of how the system operated.

Regulations might reasonably require that recipients be provided with adequate information, while avoiding a specific statement of what is "adequate." States might be required to submit a system plan that includes a well-developed plan for training during initial system implementation. After implementation, training could essentially be left to the States, with only the general requirement for information.

Provisions for the elderly and disabled. Current regulations require States to have some means for getting coupons to elderly or disabled households who have difficulty leaving the home. The regulations suggest mail issuance or the use of authorized representatives as means to deal with the problem.

In a system like Reading's, where the recipient does not normally have to make any special trips to obtain benefits,¹ the problem is practically eliminated. Other electronic systems may not necessarily have this feature, however. For example, off-line systems may require a monthly trip to an issuance point to get the new allotment.

¹Households already receiving food stamps when the EBT system was implemented had to make a special trip to be trained. In the on-going system, however, most recipients get their cards as part of a normal certification visit. The main exception is replacements for lost, stolen or damaged cards.

Regulations may therefore need a requirement that, if the system requires recipients to leave their home to receive their benefit allotment, some mechanism must exist to allow elderly or disabled households to obtain their allotment without such a trip.

Alternate shoppers. Once recipients have coupons in their possession, they may (and often do) have some other family member or a friend shop for them. Retailers may ask to see a food stamp identification card before accepting coupons, but any household member or authorized representative may present the household's card (Sec. 274.10).

An access card in an electronic system will generally have more stringent security features than the paper cards typically used in the coupon system. These features--such as a photograph, a personal identification number (PIN), or a biometric verification mechanism--may make it more difficult for the recipient to delegate shopping responsibility. In Reading, where the benefit card includes a photo and a PIN, recipients are asked to use a paper "alternate shopper card" to delegate benefit use. The recipient gives the benefit card, the PIN, and the alternate shopper card to the designated shopper. The shopper uses the benefit card in the normal way and, if the retailer notes the discrepancy between the photo and the shopper, presents the alternate shopper card as evidence of authorization to use the benefits.

Regulations should require that electronic systems include a procedure by which recipients can delegate shopping responsibility on an ad hoc basis. Based on the Reading example, this procedure may be allowed to involve some compromise of the security of the access device, at the recipient's discretion (i.e., the recipient must tell the alternate shopper the PIN).

Regulations may require retailers to check the alternate shopper card when someone other than the recipient is using the EBT card. Such a regulation would mainly be applicable when the EBT card contains a photograph, which may not always be the case as discussed in Chapter 3. Although there is little practical means of enforcing the regulation, it may serve to establish retailer liability for some instances of improper benefit use, if such a liability policy is desired.

2.2 ALLOW RECIPIENTS TO USE BENEFITS TO OBTAIN FOOD

The system must allow recipients to use their benefits to purchase authorized items at establishments participating in the Food Stamp Program.

Regulations might explicitly state this principle. No equivalent language exists in current regulations covering the coupon system, presumably because no variation is allowed in this aspect of the coupon system. Nonetheless, current regulations establish a number of principles for the use of coupons that apply equally to electronic systems:

- They may be used only by the recipient household or other persons designated by the household.
- They may be used only to purchase eligible food items for the household (with special provisions for Alaska).
- They may not be used to pay for previously purchased items, nor for advance payment.

These points require no new regulations, although a change in language is required for current regulations to apply to electronic benefits as well as coupons.

When and where. Regulations might cover the "where" and "when" of benefit use. For the electronic system to function as the coupon system does, recipients will have to be able to use their benefits at any participating establishment, at any time the establishment is open for business.

Any regulation attempting to enforce this kind of functioning will have to be carefully framed, for two reasons. First, although a recipient with coupons may use them at any participating store in the United States, no electronic system in the near future will be geographically universal. Second, mixed electronic/coupon systems will require a specification of which kind of benefit is meant. Would it be sufficient, for example, for POS terminals to function only from 9:00 AM to 6:00 PM--i.e., for electronic benefits to be usable only during that period--if the recipient could get coupons and use them at other times?

Relevant to these issues, the Reading system applies three key principles:

- Broader geographic boundaries for stores than recipients. The system must allow participation by any store

located within a reasonable shopping range of the areas where participating households reside, providing that the store is authorized to participate in the Food Stamp Program and requests participation in the electronic system.

- Manual transactions. The system must provide a mechanism allowing recipients to use their benefits in situations where electronic transactions can not be completed. (Note that, in a system with coupon dispensing, this principle implies that it is unacceptable to require the recipient to leave the store, obtain coupons from a dispenser, and return to make the purchase.)
- Conversions to coupons. When a recipient can not use any of the electronically equipped stores for an extended period of time, for good cause, the system must allow the recipient to convert electronic benefits to coupons.

Regulations embodying these three principles would go some distance toward ensuring that recipients can use their benefits anytime at any participating store.

A remaining policy question, however, is whether all establishments participating in the coupon system would have to be equipped for electronic POS food stamp purchases, assuming the stores wish to be equipped. A State might wish to place the electronic system only in certain areas, or to exclude certain kinds of stores within an area generally equipped for POS (especially in a coupon dispensing system).

If FNS wishes to distinguish between a store's authorization to participate in the Food Stamp Program and its participation in an EBT system, some regulation is required. Any of the following policies might be considered for a particular EBT system:

- All retailers within the EBT area could be required to participate in the EBT system or lose their program authorization.
- Stores could be allowed to choose whether or not they wish to participate in the EBT system, and remain authorized to accept coupons even if they decline EBT participation. The Reading system uses this approach.
- Stores could be allowed EBT participation only if they meet some criterion, such as a minimum number or value of food stamp redemptions, and otherwise allowed to continue accepting coupons. This policy would probably have the effect of reducing food stamp sales in stores not allowed to participate in the EBT system. It would represent a

change from current practice, in which all authorized stores are treated equally by the program. Whether or not such a change is acceptable is a policy decision.

- Stores could be automatically allowed to participate in EBT if they meet some criterion, and otherwise allowed to participate only if they share in the cost of their EBT equipment or transactions (the issue of retailer cost sharing is discussed further in Chapter 4). Again, the policy question is whether some stores authorized to participate in the Food Stamp Program can be treated differently from other authorized stores.

A related issue is whether retailers equipped for POS transactions shall also be required to accept food stamp coupons. In small systems or systems with coupon dispensing, retailers can be expected to continue accepting coupons because the volume of potential coupon sales will still justify the modest costs. In larger systems, however, coupons could become sufficiently rare in some areas that many stores might want to stop accepting them. This of course would restrict the flexible benefit use currently available to coupon recipients. If ensuring this flexibility is important, regulations will have to require all participating establishments to accept coupons, regardless of whether they accept electronic benefits.

The coupon conversion function also raises policy questions. Recipients might wish to convert electronic benefits to coupons in several circumstances:

- They are moving out of the area served by the electronic system;
- They are planning to spend some time outside the area served by the electronic system, but not to move;
- They live near the boundary of the area served by the electronic system, and normally shop in stores that are not equipped for electronic transactions; and
- They normally use stores equipped for electronic transactions, but want to shop at a particular non-equipped store.

Deciding which situations will be handled by coupon conversion involves a tradeoff between recipient convenience, on the one hand, and the confusion and costs of operating dual systems on the other. The principle applied in Reading would require a system to offer coupon conversion in the

first situation (moving) and at least sometimes in the second (e.g., for extended visits outside the EBT area). Unless a regulation explicitly requires or prohibits conversions in the other two situations, the State could make its own determination of whether to do so.

A technical issue arises in coupon conversion because coupons come only in integer dollar values, with the smallest coupon book valued at \$2. A recipient's EBT account has a value expressed in dollars and cents, and after purchases the value may be as small as \$.01. Coupon conversion rules will have to specify how to handle non-integer balances and balances under \$2. The Reading policy is to round upwards to the nearest full dollar amount, or to \$2 if the balance was less than \$1.

If widespread implementation of EBT systems is envisioned, procedures will have to allow a recipient leaving one EBT area to use existing benefits in a destination EBT area. If the program maintains a principle of universal acceptability of coupons, converting EBT benefits to coupons may remain the simplest procedure. The other logical possibilities are a paper "benefit transfer draft" that FNS would establish as the national medium of exchange between systems, or an inter-EBT system network allowing direct electronic transfers.

Equipping and training retailers. An electronic system must have procedures for placing any necessary equipment in participating retail facilities; ensuring the availability of needed communications, energy, or other services; and maintaining the equipment in good working order. The system must also provide for any necessary training and information for retailers to operate the system.

A policy decision is required as to the State's responsibility for these functions. In the coupon system, FNS' regional and field offices are responsible for authorizing stores to participate in the Food Stamp Program, and also for providing the stores with the information and materials they need to participate. The latter responsibility, however, is much more limited than the responsibility for installing and maintaining terminals and training people in how to use them. It is therefore necessary to decide which parts of this function will be the State's responsibility, and frame regulations with that requirement.

Another policy question is how many of a store's checkout locations must be equipped for electronic food stamp transactions. Although the Reading system places terminals at all counters, this may not be necessary. Current regulations prohibit discrimination: "No retail food store may single out coupon users for special treatment in any way." (Sec.278.2(b)). This seems to imply that the equipment pattern must not create a discriminatory situation -- that is, a situation in which all food stamp recipients and only food stamp recipients are required to use a particular checkout location. It appears possible to meet this requirement by having only a single counter equipped, however, if certain other types of customers are also excluded from the non-equipped counters. For example, all customers paying with checks, manufacturers' coupons, or food stamp benefits could be required to use specified counters. Some retailers already have analogous restrictions, such as limiting the "express lanes" to cash purchases only.

If stores do not require other classes of customer to use the counters equipped for food stamp transactions, it is not clear whether the discrimination concern can be satisfied while equipping some but not all counters. Perhaps it will be deemed satisfactory to have a specified proportion (e.g., a majority) of the counters equipped. A legal judgement and/or policy decision will be needed on this point. It should also be noted that some retailers may prefer to have all checkout locations equipped, in order to provide maximum service and avoid disruptions (e.g., when the food stamp recipient gets to the head of the line only to discover that the counter is not equipped for food stamp transactions).

A possible regulatory approach is to focus on the outcome rather than the procedure -- that is, simply require that the electronic systems not engender patterns of discrimination against food stamp recipients in the retail establishment. States might be required to submit to FNS a plan indicating how this requirement would be met. FNS could then review the plans on a case-by-case basis to determine whether they meet the spirit of the policy.

Purchase and credit transactions. An electronic system must support both purchases and refunds or credits to allow recipients to use their benefits. It may be desirable to require explicitly that an electronic system support these functions (although the purchase function is so obvious that a

requirement may be unnecessary). Some additional principles that could be incorporated in regulation include:

- Retailers may not give cash change from food stamp purchase transactions (i.e., regulations permitting cash change from coupon purchases do not apply).
- Any retailer refunds or adjustments for food stamp purchases must take the form of credits to the recipient's food stamp account. Although this was the Reading practice, it would be consistent with the spirit of current regulations for refunds to be provided as \$1 coupons plus cash change up to \$.99 (although the regulations do not specifically mention refunds). A policy decision is required to determine whether coupon/cash refunds should be allowed in an EBT system.

Account maintenance. An electronic system must maintain an "account" with a "balance" indicating the value of a household's available benefits. The account balance at any time represents the cumulative sum of benefits issued or otherwise credited to the account (e.g., through refunds) since the account was opened,¹ less the value of purchases and other debits to the account (e.g., coupon conversions). Account maintenance procedures must allow the recipient to carry a positive balance forward from one month to the next.²

Because this function does not exist in the coupon system, existing regulations hold the State responsible for the "timely and accurate issuance of coupons," but have no wording that would cover the responsibility for maintaining an accurate balance. Accordingly, a regulation to this effect is probably necessary (although the function is so obviously central it is hard to imagine it not being done in the absence of a regulation).

An on-line system, like Reading's, will maintain recipient accounts in a central computer file. In an off-line system, the recipient's benefit card will maintain the account. The physical form of the record could take various

¹An off-line system might be designed to give the recipient a new card with each issuance. The recipient would redeem the value on that card and then dispose of it. In such a system, the available "balance" would actually be the sum of the balances on all the cards still in the recipient's possession.

²About a third of the active Reading recipients, on average, end the month with a positive balance in their accounts. Usually the balance is very small (less than \$1 or 1 percent of the issuance).

forms in off-line systems, depending on whether the benefit card uses magnetic stripe, microchip, or laser technology. These variations mean that the language of regulations will have to focus on the functions to be performed with the account while being inclusive as to location and physical form.

Regulations could specify that the system for maintaining recipient accounts must allow them to be credited for each benefit issuance or refund and debited for each purchase or coupon disbursement. The account balance must be accurate and current (with an exception for manually authorized transactions).

Balance adjustment. An electronic system will have to be capable of electronic balance adjustments -- i.e., adjustments to the value of the recipient's electronic account. Policy decisions will be required in order to establish regulations in this area.

Balance adjustments might be required in several situations:

- A recipient's account is accidentally under-credited (i.e., the credit is less than the intended allotment amount);
- A recipient's account is accidentally over-credited; or
- Unauthorized debits are posted to a recipient's account, either by accident, through insider manipulation, or through outsider tampering.

Note that the balance adjustment in an on-line system takes place in the central computer file that maintains the recipient account. In an off-line system, where the balance on the recipient's benefit card effectively determines how much the recipient can spend,¹ and necessary adjustment must be made on the card itself.

In the coupon system, the allotment amount is sometimes adjusted, generally because the recipient realizes that the amount is erroneously low. An erroneously high allotment discovered by the agency may be recovered, but

¹The balance on the card may sometimes be incorrect--that is, may not reflect the amount of benefits the recipient should have available--but it nonetheless determines what transactions may take place. This issue is discussed further below.

usually by deductions from future allotments. Virtually no adjustments are allowed for coupon loss or theft, however.

In the Reading system, program personnel adjusted recipient accounts in a few instances when erroneous credits resulted from a problem with the electronic issuance posting. Otherwise, the policy held that benefits in a recipient's account were the equivalent of coupons in the recipient's possession, and hence balance adjustments were not allowed for unauthorized debits.

Regulations will need to cover the following points:

- Recipients must be given additional benefits if their account is credited for less than the correct allotment. This can be done by means of a balance adjustment or a supplemental issuance. The regulation might include a timeliness requirement (e.g., within two working days of the discovery or report).
- If an over-credit is discovered and the recipient has not already used the benefits, the amount in error must be deducted from the recipient's balance.¹ A policy must be established concerning any necessary notification to the recipient of such an adjustment.
- If an over-credit is discovered and the recipient's balance is not sufficient to cover the appropriate adjustment, procedures must exist for recovering the erroneous amount. Regulations pertaining to the recovery of overpayments may be applicable here (Sec. 273.18).

In addition, regulations will have to identify any situations in which the recipient will be given benefits to compensate for unauthorized debits, or specify that no unauthorized debits shall be compensated. It may also be necessary to define what constitutes proof of an unauthorized debit.

¹Alternatively, the adjustment could be effected by reducing the amount of the next issuance. Over-issuance incidents that occurred in Reading suggest the desirability of an immediate adjustment to the balance, in at least some situations. These were incidents in which a system error resulted in posting extra issuances to recipient's accounts. A few of the erroneous credits were very large--large enough to equal several issuances. The errors were discovered within hours, or at most a day or two of their occurrence. In such a situation, it is more reasonable to remove the erroneous issuance immediately than to wait, let the recipient spend it, and then reduce the amount of future issuances.

Overdrafts. Although recipients in the coupon system can not use more coupons than they have, an electronic system necessarily has some potential for overdrafts. The Reading system for manually authorized purchases allowed some overdrafts to occur, and most other system designs will entail similar possibilities. Moreover, a system malfunction could lead to an overdraft. For example, if a recipient's purchase transactions are accidentally posted to the wrong account, the recipient might over-spend before the error is discovered.

Overdrafts are obviously undesirable, but it is unlikely that they can be precluded by regulation. Two regulatory approaches to control the problem are possible:

- Hold the State liable for some or all of the value of overdrafts. This approach might apply particularly to overdrafts arising from system errors.
- Establish procedural regulations intended to limit overdrafts--or Federal liability for overdrafts--in those areas in which they are most likely, such as manual transactions. The Reading system employs a procedure in which a household's maximum overdraft is \$35 in a day (if the procedure is followed correctly). It is probably not wise to mandate this procedure for all electronic systems, because differing manual authorization mechanisms will be appropriate with different system designs, especially off-line systems. Regulations could require that manual authorization procedures have a maximum overdraft liability of a specified dollar amount, or the State could be held liable for anything over that amount.

A special kind of overdraft may occur in off-line systems. The account balance on the card, which determines what the recipient can purchase, may become incorrectly large, either through a system problem such as card failure or through tampering. In this case recipients may redeem more benefits than they have received, even though the balance on their card is not overdrawn. In the absence of actual experience with off-line systems, it is not known what procedures will prevent this kind of overdraft. Regulations for off-line systems could hold the State liable for such overdrafts, however.

The extent of State liability for overdrafts is a policy decision, and a complex one. Current regulations tend to hold States liable for losses that might reasonably be prevented by the correct application of prescribed proced-

ures. Thus, States are liable for coupon losses from inventory and for coupons issued in exchange for expired ATPs, but not for coupons issued in exchange for counterfeit ATPs. The line is difficult to draw with overdrafts, because it is clear that any system will allow some overdrafts. The main possible directions for policy seem to be:

- Hold States liable for all overdrafts. In a tightly designed system, overdrafts should be rare enough that the liability is not punitive (at least in an on-line environment). Nonetheless, the policy provides an incentive to States to minimize overdrafts, possibly at significant cost or inconvenience to recipients and retailers. At the extreme, the policy motivates the State to allow no manual authorizations at all.
- Establish a performance standard--i.e., an allowable total value of overdraft losses--and hold States liable for losses exceeding that level. The Reading demonstration does not provide data on actual losses, but a reasonable performance level for that system design is likely to fall in the range from one-thousandth to one-hundredth of a percent (.00001-.0001) of total issuances.¹ Different performance levels might be established for different system designs, based on experience.
- Require FNS approval of States' procedures concerning manual transactions and any other potential overdraft situations and monitor States' implementation of those procedures, but do not hold States liable for losses. This allows FNS to make the tradeoff between participant convenience and losses. It minimizes the incentive to States to control losses, however, and might lead to less aggressive implementation policies, such as actions to recover losses from future issuances.

Information for recipients. The system must provide recipients with information about their "account balance"--that is, the amount of food stamp benefits available to them.

Because the system, rather than the recipient, maintains the account, it is obvious that the system must give recipients information about the balance. But exactly what will satisfy this general requirement, and what should be included in regulations, is a difficult policy decision.

¹See Hamilton et al., pp. 91-92.

Regulation E requires that consumers be provided with relatively extensive information about electronic funds transactions--generally more extensive than the information provided in the Reading system. As in the area of consumer liability, the fact that commercial POS systems comply with these requirements may establish a set of conventional expectations to which food stamp administrators will want to respond, or which will serve as the basis for client advocates' demands. Moreover, any attempt to integrate EBT with commercial systems may require the EBT system to conform to the commercial system's reporting practices, which will be governed by Regulation E.

The major types of information that could be provided are noted below, along with the Reading and Regulation E approaches to each:

- Purchase record. The Reading system provides a receipt for every food stamp purchase. Consistent with the requirements of Regulation E, the receipt includes the amount, date, and time of the purchase, the identity of the retailer, and a transaction number. The receipt also shows the balance remaining after the transaction (not a Regulation E requirement).

The American Banking Association's draft guidelines for POS systems contain an additional information requirement. They require the consumer to have visual verification of the purchase amount and to approve it before authorization. For example, the customer may have to press an "ENTER" button while the terminal displays the purchase amount.

- Balance inquiry. The Reading system provides several means, in addition to the receipt, by which recipients can find out their remaining balance. Using a touch-tone telephone, they can call up an audio response unit attached to the central computer, and a synthesized voice tells them their balance. Balance inquiries can be made from any terminal at a checkout counter. Some stores have balance-only terminals, which respond to a recipient query by showing the balance in the terminal's display panel. Finally, they can go to the local welfare office, where a worker can obtain an account balance.

The Reading balance inquiry capability generally provides at least as much information as commercial systems. Regulation E has no specific requirement on this point. The draft ABA guidelines for POS systems would actually prohibit balance inquiries at attended terminals, presumably to preserve the privacy of individual account information. (At the same time, the ABA equipment guidelines for POS terminals require them to be able to carry out a balance

inquiry function.) It is conventional for customers using Automated Teller Machines to be able to find out the balance in accounts they can access with their ATM card, although this capability may be limited (e.g., to normal banking hours). Information about the unused portion of a credit balance or daily transaction limit is not generally conveniently available.

information on issuances. Regulation E requires that consumers be notified of electronic transfers to their accounts.

- Balance adjustment record. Reading recipients received no specific information on balance adjustments. Regulation E has no specific requirement for separate information about such transactions, although it generally requires some customer notification for all transactions affecting the balance.
- Account activity summary. The Reading system did not provide regular statements of account activity. Recipients could go to the welfare office, where workers could obtain on-line information on all transactions (except balance adjustments, which produced no transaction record). Regulation E requires the card-issuing institution to provide a monthly statement detailing all electronic account activity; in debit card systems, this requirement is usually satisfied by the bank statement for the customer's deposit account.

Food Stamp Program regulations in this area will need to establish the minimum level of information that an EBT system must provide. The principles applied in Reading suggest that this minimum is a printed record of each purchase transaction and the balance remaining after the transaction, and on-demand information about the current account balance at any time. Because the telephone inquiry does not seem to have been important to most Reading recipients in keeping track of their balance, however, an acceptable minimum might be to have balance information available from any EBT-equipped store at any time the store is open for business. In off-line systems, the telephone

coupons have no expiration date. Hence, recipients may use the coupons immediately, after a short or long delay, or never.

In an on-line system, the State maintains an account containing each household's benefits. A household that stops "participating" in the Food Stamp Program, in the sense that it stops receiving new allotments, may still have benefits in its account. This occurred in Reading for a substantial proportion of all cases--perhaps one-fourth to one-third of all households that ceased participating.

A number of other situations can create inactive accounts in an EBT system. These include accounts that are established but never activated because the recipient never appeared for training; accounts that are activated but never used; and zero-balance accounts of households no longer receiving food stamps.

It is clear that inactive accounts should not be maintained indefinitely in an EBT system. The question is when to take the accounts off the system, and what to do with remaining benefits.

Data from Reading indicate that gaps in account activity rarely exceed two or three months. Only a handful of cases were observed -- less than half of one percent of all accounts that were observed to become inactive with a positive remaining balance -- in which an account became active again after five or more months of inactivity. This suggests that regulations might safely require inactive accounts to be maintained in the system for six months.¹

Another policy decision is required concerning the handling of benefits remaining in inactive accounts after six months. The alternatives range from "destroying" the benefits -- that is, allowing the recipient no further access -- to maintaining records that would allow a recipient to claim the benefits through some specified time period. Whatever the decision, it

¹The Reading system has no general policy for taking inactive accounts off the system. When the State converted from the original EBT equipment to new equipment in the extended demonstration, accounts with a zero balance and no activity for an extended period (about nine months) were taken off the system. This was a one-time event, however: no policy exists for routine removal.

will have to be incorporated explicitly in regulation, because no clearly analogous situation exists in the coupon system.

Laws and regulations governing funds in inactive bank accounts are probably not directly applicable here, but may provide a useful point of comparison. Procedures are subject to both State and federal regulation, and therefore vary from State to State. Often, if an account has been inactive for a period of some years and the bank can not locate the owner of the account, the funds are forfeited and become the property of the government.

An off-line system may present somewhat different problems. Benefits on the card are similar to coupons, and conceptually could be used at any time. However, the off-line system is likely to involve some security codes that change periodically, which means that recipients who do not use their cards for an extended period may have attempted POS transactions rejected. The recipient might then have to go to an issuance point or to the local food stamp office to have the card re-validated. Policy must determine the minimum allowable length of an inactive period before re-validation will be required, and whether there is any period after which benefits are forfeited.

Another potential issue in an off-line system concerns the availability of unclaimed allotments. If the system requires recipients to visit an issuance point each month to have the new allotment credited to the card, the recipient might fail to make the trip for one or more months. Again, policy must determine how long the EBT system must hold the benefits available at the issuance point, and whether the benefits shall be destroyed after some period. This issue has an analogy in the ATP system, where ATPs expire at the end of the month for which they are issued. Benefits not claimed by the ATP expiration date are lost.

2.3 CREDITING RETAILERS

An electronic system must credit retailers in dollars for electronic food stamp benefits that they accept in payment for eligible items.

Unlike the coupon system, in which a single set of procedures for crediting grocers applies nationwide, crediting or "settlement" procedures in electronic systems may vary from one system to the next. The procedures will have two common elements:

- Information on individual purchases and refunds is assembled at some central location(s); and
- Deposits are made to retailer accounts in local banks.

Many systems, like Reading's, will rely on one or more financial institutions to initiate funds transfers to the retailers. These systems will have a third key element:

- The institution initiating the deposits is reimbursed by USDA.

In the Reading system, each purchase or refund transaction instantly creates a record at the EBT Center. Once a day the Center reads the records and creates a summary of the amount due each retailer. This information is formatted as prescribed by the Automated Clearing House to initiate transfers to each retailer, a tape is sent to a local ACH interface bank, and the bank sends it on to the Philadelphia Federal Reserve Bank, which uses the ACH system to transfer funds from the interface bank to the retailers' banks. The interface bank makes a wire funds request through the New York Federal Reserve Bank for funds to cover the retailer deposits; the funds come from a USDA account with the U.S. Treasury.

Alternative procedures might have transaction information stored in the grocery store terminals, with the central computer calling up each terminal to retrieve transactions once a day (this procedure is likely in an off-line system). Rather than use the ACH, all local banks serving participating retailers might establish accounts at a local clearinghouse bank; when the clearinghouse bank gets the deposit information, it transfers funds directly into the destination banks' accounts. USDA might also have an account with the clearinghouse bank, so the clearinghouse bank would simply be transferring funds from one of its depository accounts to others.

Off-line systems could use the same general procedures, or might adopt settlement procedures more closely resembling the coupon system's redemption process. A file of transactions might be accumulated during the day on a portable storage medium, such as a cartridge tape or a floppy disk. Retailers would take the file to their local bank, which would read the file, total the transactions, and credit the retailer account. The bank would then combine

retailers' transaction files to submit a transfer request to the Federal Reserve Bank.

Unless a policy decision is made to restrict the choice of settlement procedures, regulations requiring performance of this function will have to be phrased rather broadly. The basic requirement is simply that retailers be credited accurately for benefits received.

Timing of settlement. The Reading system credits retailer accounts each normal bank business day. The EBT Center "bundles" all transactions made during a specified 24-hour period, such as from 2:00 PM to 2:00 PM. A purchase made on a Thursday morning, for example, is captured in the bundling operation Thursday afternoon, resulting in a credit to the retailer's bank account on Friday morning. A purchase made after 2:00 on Thursday is captured in Friday's bundling operation, and results in a deposit to the retailer's bank account on Monday morning.

This daily cycle is not mandated by any external regulations. The ABA draft guidelines for POS systems indicate that settlement shall take place on normal banking days, but do not specify a time between transaction and settlement. Nonetheless, daily settlement is the conventional practice in commercial systems. Daily settlement affords a level of service to retailers roughly comparable to the coupon system, assuming that the retailer takes each day's coupons to the bank the following morning and that the bank credits the grocer's account immediately upon receiving the coupons. (In practice, many retailers do not make daily deposits and some banks wait until they receive credit for the coupons, which may be several days, before crediting the grocer.)

It is therefore reasonable for regulations to require an electronic system to credit retailers within two bank business days of accepting food stamp benefits. A system that uses a late cutoff time for settlement may be able to post all credits the next day, but an early cutoff time like Reading's means that some sales will not be credited until the second day after they occur.

Informing retailers. An electronic system must provide retailers with two kinds of information about food stamp activity: records of individual food stamp purchases or refunds, generated within the store at the time of the

transaction (transaction records); and information about deposits to retailer bank accounts (deposit records).

This function enables retailers to make sure that the correct amount is deposited to their account. It may also serve as management information, allowing retailers to see the volume and value of food stamp transactions by time, cashier, or checkout station.

Although their form varies, paper transaction records produced at the time of the transaction are universal in commercial POS systems. Many systems use a multi-copy receipt form which the cashier inserts into the printer; after printing, the cashier gives one copy to the customer and puts the other(s) in the cash drawer. The Reading system produces transaction records in the form of a "journal tape" maintained by the printer attached to each store terminal. The tape is, in effect, a carbon copy of the receipts printed for customers. The terminal also maintains in computer memory certain summary information about transactions occurring between the time the terminal is signed on and the time it is signed off. At sign-off, the terminal prints out the summary information.

Neither Regulation E nor the ABA guidelines explicitly require that the merchant receive immediate documentation of individual transactions. Nor does the coupon system have any analogous requirement. Nonetheless, the retailer clearly needs some basis for verifying the accuracy of credits received. It seems desirable therefore for regulations to require the electronic system to provide the retailer with immediately available documentation of each transaction. A policy decision must determine whether to require this as hard-copy documentation, or whether a machine-readable record (for example, a record maintained in the terminal's computer memory) will suffice.

It is clear that retailers need a record of each food stamp-related deposit to their bank accounts, but the necessary timing is less clear. In the coupon system, the retailer gets a deposit record immediately upon taking coupons to the bank. Commercial POS systems typically provide daily credit

information to merchants, although they may document the initiation rather than the completion of a transfer.¹

In the Reading system as originally designed, retailers' monthly bank statements were their only deposit information. This proved insufficient for many retailers, however. Many complained, and some telephoned their banks periodically for information. As redesigned in the extended demonstration, retailers can call a special number at any time to learn the amount of their previous day's deposit.

How frequently to require deposit information is therefore a matter for policy decision. One regulatory approach would be simply to require that information be provided, and let the State determine its frequency, presumably in response to retailer demands. This strategy entails some risk that a State could design a system which, upon implementation, would prove sufficiently unsatisfactory to threaten retailer participation, which could result in costly redesign. A lower-risk approach would be to require the electronic system to provide information at least monthly, but to be capable of providing daily information upon retailer request.

2.4 ENSURING FISCAL ACCOUNTABILITY

An electronic system must incorporate procedures that ensure the legitimacy and accuracy of all transactions and account balances. This includes reconciliation procedures to be performed as a routine part of system operations and the generation of records that serve as an audit trail for external review.

¹In most systems, a discrepancy between a transfer initiation and the deposit can occur only by error. In some commercial POS systems, however, the electronic transaction is equivalent to a check. That is, it results in a transfer request, which may be denied if the customer's account has insufficient funds. In this situation, the transfer initiation record should correspond to the merchant's transaction record, but may differ from the actual amount deposited. This discrepancy will be resolved through "return items," i.e., transfer rejection records.

Although one could conceive of an EBT system in which the retailer runs some risk of not being credited for electronic benefits accepted in good faith, no such system has been proposed. The principle of no retailer risk is inherent in the basic requirement stated at the beginning of this section, that authorized retailers must be credited for all food stamp benefits accepted in payment for eligible items.

This general requirement reflects the spirit of a number of specific regulations in the coupon system that require reporting and reconciliation activities by State and federal agencies. The specific points of reconciliation in an electronic system differ from those in the coupon system, however. The electronic system's reconciliation requirements cover issuances, credits, and account balances, described in turn below.

Issuance reconciliation. The electronic system must verify that benefit allotments credited to recipient accounts correspond to the benefit allotments authorized by the State.

The coupon system similarly requires issuance reconciliation. For example, States with ATP systems are required to maintain records of ATPs generated and ATPs actually exchanged for coupons, and to reconcile the two (FNS Form 46). They must also report on coupon inventory, reconciling inventory on hand against the previous inventory, deliveries received, and coupons issued in exchange for ATPs (FNS Form 250).

The Reading EBT system implements this principle of issuance reconciliation through two procedures:

- Transmission acknowledgment. Each time the EBT Center receives from the State a list of issuances to be posted to recipient accounts, it computes the total value of those issuances and sends the information back to the State for verification against a total computed before the transmission.
- Transaction comparison. The EBT Center periodically prepares a computer tape listing each benefit allotment credited to each recipient account. The State compares this information to its record of issuances generated during the month. This reconciliation is analogous to the State's monthly reconciliation of ATPs accepted in exchange for coupons, resulting in the FNS Form 46 report.

Different system designs may require somewhat different kinds of regulations. In an off-line system, for example, it may be important to distinguish between two steps in the issuance process: one that results in a computer file listing benefit allotments available to recipients; and one that adds the amount of the benefit allotment to the balance in the recipient's benefit card.

Regulations can probably cover the various possible system designs with three basic requirements:

- The State must maintain records of the benefit allotments intended for each household, separate from records maintained within the EBT system (in other words, a record of the issuances transmitted to the EBT system).
- The State must maintain records of the allotments actually provided to each household. In an on-line system, this means allotments posted to the account maintained by the EBT Center. In an off-line system, it refers to allotments credited to the balance on the recipient's card.
- The State must reconcile these two sets of records at least monthly. Any intended issuances not resulting in the provision of the intended allotment to the household must be explained in the reconciliation (in the off-line example above, this would include situations in which the household failed to have some or all of the available allotment added to the benefit card). Similarly, any credits to recipient accounts not corresponding to an intended issuance must be explained.

These reconciliation procedures are roughly comparable to the reconciliation reported in the FNS 46 in ATP/coupon systems. Because an EBT system has no direct analogy to a coupon inventory (i.e., a stock of unissued benefits), there is no need for reconciliation requirements comparable to that of the FNS 250.

Settlement reconciliation. The second critical area for reconciliation concerns the flow of benefits out of the electronic system--i.e., the credits to grocers. This process may be structured in various ways, but will revolve around three settlement functions:

- Credit and refund transactions will be summarized to determine the net value of credits due each retailer.
- Funds transfers to those retailers will be implemented.
- A corresponding transfer from USDA funds will occur.

The logical points of reconciliation depend in part on how the responsibility for settlement is organized. In the Reading system, for example, the EBT Center summarizes transaction data into a list of transfers required, and sends the information to an ACH interface bank. Hence one reconciliation is a transmission acknowledgement, in which the interface bank

reads the total value of transfers on the tape and sends it back to the EBT Center for comparison with its total. The interface bank initiates the transfers to retailers from its own funds and then requests a corresponding transfer from USDA. The interface bank provides information on the total transfers to retailers and the amount of the transfer from USDA goes to FNS, where the two are compared.

If settlement is centralized--that is, if one organization is responsible for totaling transactions and initiating transfers, regulations might require the following reconciliations:

- Daily reconciliation of total transfers to retailers (summarized at the point at which transfers are initiated) against the net value of all purchases and credits (summarized from the EBT transaction file).
- Monthly reconciliation of total transfers to each retailer (from the transfer initiation point) with the net value of transactions (from the EBT file).
- Daily reconciliation of total transfers to retailers with total transfers from USDA. (FNS may perform this reconciliation, in which case the regulation may simply require States to provide the information on transfers to retailers.)

These reconciliation procedures are somewhat more stringent than coupon system reconciliations. The coupon system has no data on individual transactions, but uses coupons as the physical evidence of the value of total transactions. Verification of the accuracy of the bank's credit to the retailer is left entirely up to the bank and the retailer. The Federal Reserve Bank verifies that the bank's request for reimbursement matches the value of food stamp coupons the bank submits, although this is done partly on a sampling basis rather than a full account of coupons submitted. Total transfers to banks are reconciled against transfers from USDA, as in the Reading system.

If an EBT system uses decentralized settlement--as in the off-line example cited earlier, where retailers give their transaction information directly to banks--reconciliation might be equivalent to that in the coupon system. Instead of coupons, however, the evidence of food stamp value accepted would be the retailer's file of transaction data. Reconciliation of retailer credits against transaction data could be left to the bank and the

retailer. The bank would forward the transaction data to the Federal Reserve Bank, which would probably verify the bank's reimbursement request by totaling the retailer transaction data, at least on a sampling basis. Total transfers to banks would be reconciled against total transfers from USDA, as in the other systems.

System balancing. Issuance and settlement reconciliation are designed to make sure that the flow of benefits into and out of the EBT system occurs correctly. System balancing ensures that the total value of benefits in the system or in any account is not artificially increased or reduced.

System balancing reconciles benefits issued with benefits redeemed and benefits remaining in recipient accounts. The coupon system has no comparable function: coupons redeemed can not be reconciled against coupons issued.

The principle of EBT system balancing is that today's balance should equal yesterday's balance, plus any legitimate inflows since yesterday's balance was computed, minus any legitimate outflows in the same period. A recipient's account balance in the Reading system, for example, should equal the previous balance plus any new allotments credited, plus any retailer refunds, minus any purchases, minus any conversions of electronic benefits to coupons.

Reconciliations may balance individual recipient and retailer accounts or the system as a whole, and may be carried out for any period. The Reading system involved daily and monthly balancing of all accounts and of the system as a whole.

An off-line system presents special problems for recipient account balancing because the balance in the recipient's benefit card is the one that determines the value of purchases the recipient can make. A central computer file could maintain a "shadow" balance--that is, a balance constructed out of information captured when credits are posted to the recipient's card and transactions occur at retailer terminals.¹ The shadow balance could diverge from the balance on the card for a number of reasons, however. For example,

¹This could be done with either centralized or decentralized settlement. With decentralized settlement, however, the local bank (or Federal Reserve Bank) would have to send the retailer transaction files to the EBT Center.

an error or system malfunction might cause a purchase transaction to create duplicate records, resulting in two credits to the retailer and two debits to the shadow account, but only one debit to the card. Alternatively, tampering might artificially increase the balance on the card, while the shadow account continues to show the legitimate balance.

To allow recipient account reconciliation, the off-line system would have to create a transaction record that contains the balance indicated on the card as well as the value of the transaction itself. This allows comparison of the shadow balance with the card balance, and thus the identification of discrepancies between the two. Because the State does not have immediate access to the recipient's card, however, full reconciliation of discrepancies may not be possible. In particular, if it is determined that the account balance on the recipient's card is incorrect, the State cannot immediately adjust the balance.

Retailer account balancing is not meaningful in an off-line system. Although data from all retailer terminals can be assembled to provide an external check on the recipient's card balance, the reverse is not practical. Even if all recipient transactions are recorded on each recipient's card, any attempt to assemble all these transaction data on a routine basis would be very costly, and it would be unlikely to capture all relevant data.¹ Moreover, balancing an on-line system at a given moment finds some issued benefits in recipient accounts, some in retailer accounts, and some redeemed. An off-line system can only be balanced at the point when transaction data have been forwarded for settlement: at this point, all issued benefits are either in the process of being redeemed or in receipt accounts.²

Whether regulations should require account balancing is not entirely clear. The coupon system involves no such reconciliation. On the other hand,

¹Transaction data could be captured from recipients' cards when they have their next allotment posted to the card. Data would not be obtained, however, from recipients terminating from the program, who have no further allotments. Thus, the system would be missing roughly five percent of the transaction data each month.

²The same is true in an on-line system if it is balanced at the moment of bundle-up (i.e., when the day's transaction total is computed for each retailer for settlement).

the coupon system's inability to compare the amount of benefits issued with the amount redeemed has been criticized. The capacity of an electronic system to perform such comparisons has been considered a positive feature.

The argument for requiring account balancing is somewhat stronger for on-line than off-line systems. In an on-line system, the State is responsible for maintaining the account balance, so account balancing is a way to make sure this function is performed correctly. Moreover, an on-line system tends to concentrate issuance, balance maintenance, and settlement in a single computer center, and account balancing is a way to protect against fraud in this situation.

The argument for off-line systems is more cloudy. Account balancing may be more difficult in an off-line system. If the system can operate without a centralized structure of computer files storing transactions and maintaining balances, then account balancing will be a costly appendage. Account balancing may also be less necessary as a protection against abuse in the computer center, because fewer functions (and opportunities for fraud) are concentrated there. On the other hand, omitting account balancing leaves the system with limited protection against card counterfeiting, tampering, and accidental error.

Policy decisions are clearly required before framing regulations in this area. Even if account balancing is to be required in both off-line and on-line systems, it may be desirable to distinguish between the two. For on-line systems, it seems reasonable to mandate monthly account and system balance reconciliation, and daily balancing at least of the system and perhaps of individual accounts. For off-line systems, regulations may require the same comparisons, and may also require the State to propose for FNS review a plan for achieving full reconciliation and adjustment.

Audit trail. An electronic system must create and maintain records that will allow an external auditor to verify the legitimacy of transactions and account balances.

The Reading system involves two main computer files. The Master File contains a record for each account, with identifying information and the current balance. The History File contains a record for each transaction, indicating the nature of the transaction, the account(s) involved, and the amount

of benefits. At the end of each month, the Master File is copied and stored in tape archives. All records on the History File are also archived. These two sources provide a record of every transaction for every account,¹ and allow recreation and reconciliation of the account balance at any point in time.

Any EBT system can have essentially similar files -- that is, one or more files maintaining current account balances, and one or more files storing transaction records. One can imagine system designs without these features, however. In an off-line system, for example, recipients could obtain and use benefits and retailers could be credited without creating a central shadow balance file. An on-line system could carry out its central functions without creating transaction files, simply maintaining a current balance file like the EBT Master File in Reading.

It will be desirable for regulations to ensure that any system will create the appropriate records, and that they will be retained for appropriate periods. One possible requirement is:

- An EBT system must document every transaction that alters the benefit balance or identifying information in any recipient, retailer, and program account, and every transaction that initiates or requests funds transfers. This documentation must be maintained for a period consistent with other requirements for audit trail information, generally three years (Sec.274.7).

On-line systems clearly have to have account balances, but whether an off-line system needs them is a matter of system design and of policy. In

These records must be retained for the same period as transaction records.

2.5 PROVIDING MANAGEMENT INFORMATION

An electronic system must provide information that will aid system managers and Food Stamp Program personnel in monitoring and managing system operations.

An EBT system can provide some information that is currently reported to FNS. In addition to reconciliation information discussed earlier, FNS receives reports on program participation (FNS 388) and data on redemptions by retailers and banks (through the Redemption Certificate and the Food Coupon Deposit Document). Regulations might therefore require an EBT system to provide this information.

The Reading system also produces a substantial array of routine monthly management reports. For the most part, they document the level of particular types of activity on the system, including both normal activity (such as the number and value of allotments issued and purchases made) and potential problem indicators (e.g., transactions rejected for various reasons, instances in which all incoming telephone lines are in use simultaneously). Some of the information is presented separately by store, store type, recipient group, or other categorizations of interest.

Although it is clear that an EBT system must carry out this function, it is not clear that any federal regulation is required. The consumers of the management information will be State food stamp managers and EBT system managers, and their information needs will differ from State to State and system to system. For most purposes, it seems more reasonable to allow the consumers to define their information needs than to establish requirements in regulation.

A possible exception to this principle concerns performance monitoring. To the extent that performance standards are incorporated in federal regulations, it will be reasonable to require systems to provide information about how well the standards are being met. Possible performance standards are discussed in Chapter 3.

CHAPTER THREE

DESIGN AND PERFORMANCE REQUIREMENTS

In establishing regulations for electronic benefit transfer systems, FNS must consider not only what functions the system must perform, but how--and how well--it must perform them. This chapter therefore considers areas in which the regulations might embody standards for system design or performance.

Regulation of system design features or performance levels may have several objectives:

- Cost-effectiveness. Particular technological approaches or potential system features may be known to be too costly, too unreliable, or otherwise inappropriate for the program.
- Compatibility among EBT systems. In the coupon system, a recipient who is issued coupons in one county can redeem them at participating stores in other counties or other States throughout the United States. To achieve a similar capability with State-specific EBT systems will require key elements of the system to be compatible.
- Compatibility with commercial POS systems. Economies of scale and retailers' aversion to multiple terminals at the checkout counter argue for integrating food stamp EBT systems with commercial systems (piggybacking), which again requires compatibility.
- Protection of program integrity. Systems with inadequate security features might incur substantial losses both of benefit dollars and public credibility.
- Protection of recipient and retailer interests. Certain program features and performance levels may be judged essential to achieving the goals of the Food Stamp Program in terms of its relationships with its primary participants, food stamp recipients and participating retailers.

The section begins by examining potential areas of regulation concerning individual system components, which generally involve considerations of cost-effectiveness and compatibility. It proceeds to consider issues of security, processing times, reliability, capacity, and user convenience -- issues in which the dominant concern is the protection of program integrity and participant interests.

3.1 SYSTEM COMPONENTS

On-line vs. off-line. The most fundamental design choice for an EBT system is whether to use an on-line or off-line approach. The Reading system, the only example to date of an operating EBT system, uses an on-line approach. This approach has the advantage of compatibility with most existing commercial POS systems. Some people, however, have argued that an off-line system would be more cost-effective: it would eliminate the communication cost and the waiting time that occurs when transactions must be authorized by a central computer.

Given the promising results from Reading and the absence of any experience with an off-line EBT system, it is clearly inappropriate for regulations to mandate an off-line approach. The policy options, therefore, are to permit only on-line systems or to allow a State to take either approach.

The compatibility argument alone is probably not enough to justify mandating the on-line approach exclusively. It has not yet been demonstrated that integrating EBT with commercial systems will be feasible and cost-effective, even though the arguments in that direction are strong. Moreover, an off-line approach or a mixed on-line/off-line approach could be designed to be compatible with on-line commercial POS systems.

Although an off-line approach may be viable, it may be desirable to prohibit States from using this approach until it has been implemented in a controlled, demonstration setting. In this case, a regulation could both contain the prohibition and explain the potentially temporary nature of the restriction.

Access card technology. The benefit card is the system component offering the most important choice among substantially differing technologies. The three basic alternatives are the magnetic stripe card, the "smart" or chip card, and the laser card.

A regulation precluding off-line systems will tend to limit use of the chip card and the laser card. Although these technologies could be used in an on-line approach, their major advantage is a substantial storage capacity which facilitates off-line use. Nonetheless, if a food stamp EBT system were integrated with other programmatic uses, one could imagine employing a chip or laser card even if the EBT authorizations were on-line.

The arguments for and against regulations on acceptable card technology are comparable to those for on- vs. off-line systems. The magnetic stripe card is compatible with current commercial systems, and the chip and laser cards have not been proven in a food stamp application. More generally, the chip and laser card technologies are still developing rapidly, and they have few applications that are even comparable to an EBT system. These considerations may argue that regulations preclude chip card and laser card technologies from EBT systems except under demonstration circumstances.

Magnetic stripe cards. The widespread use of magnetic stripe cards in commercial POS and Automated Teller Machine systems has resulted in quite specific standards. The standards cover:

- Shape, length, width, and thickness of the card;¹
- Material used in card construction, with specifications for flexibility and hardness;¹
- Positioning of the magnetic stripe, the signature panel, and embossing;¹
- Nature and format of information that must be embossed on the card;²
- Nature, format, and location of information that must be encoded on the magnetic stripe.²

These "bank card" standards do not automatically apply to cards in an EBT system. The standards are essentially voluntary, and one could readily design an EBT system that would not conform with any of the standards. A policy decision is therefore needed about the extent to which EBT benefit cards should conform to the existing standards covering commercial debit cards.

An EBT card could conform to some but not all of the bank card standards. Conformity would logically occur at one of several levels, each with particular advantages and disadvantages. Each increased level of conformity

¹Standards established by the International Organization for Standardization (ISO).

²Standards contained in the draft American Banking Association Guidelines for POS Systems.

makes an EBT system more compatible with available equipment and existing or future systems. To illustrate the possibilities, five potential levels of conformity are described below.

At the first level, the card's magnetic stripe would be positioned at the standard distance from the card edge, allowing the card to be read by readily available "off the shelf" swipe readers. The card need not meet any of the standards covering card size and physical characteristics or information content and format. The Reading system uses this general approach. It has the advantages of avoiding the costs of a non-standard terminal, allowing the system to use a terminal that could read other types of cards, and allowing the card to meet other program purposes (such as including a photograph, in the Reading system).

The second level of conformity is equivalent to the first, but would allow the card to be used in an insert reader as well as a swipe reader. This simply broadens the range of terminals with which the card would be compatible (importantly, it would become compatible with ATM-type terminals). In addition to conforming to stripe position standards, the card would have standard bank card dimensions. The minimum acceptable level of rigidity would be greater than the first level requirement, but less than the bank card standard. The card would not have to meet other standards.

At the third level, the card would conform to requirements concerning information stored on the magnetic stripe, including standards for construction of a Primary Account Number (PAN) and Personal Identification Number (PIN). This would provide full electronic compatibility with commercial systems, and hence allow piggybacking on such systems. It would also provide the basis for network linkages among EBT systems. The card would still not conform to bank card standards concerning embossed information or card rigidity and flexibility, saving some expense in card manufacture and initialization.

The fourth level is the same as the third, but adds standards specific to the Food Stamp Program for the content, location, and format of program information. This level may be relevant only to off-line systems, in which the card carries the recipient's available balance and related data. The specification thus provides the basis for compatibility among various off-line EBT systems.

The fifth level would have the EBT benefit card fully conforming to bank card standards, plus the special program standards for encoded information. This would make the card fully usable in commercial POS systems, which use the embossed information to generate paper transaction records in some situations.

How much conformity should regulations mandate? That depends on the extent to which policy-makers want to encourage integration with commercial systems and transferability of benefits across EBT systems. The Reading example suggests that at least some States, left to their own devices, will choose a low level of conformity with standards. To ensure reasonable opportunities for subsequent piggybacking and inter-EBT system networking, regulations would have to require conformity equivalent to level 3 above -- i.e., meeting standards for card dimensions, magnetic stripe positioning, and data on the magnetic stripe.

Existing regulations require recipients in large project areas to have a photo ID card (Sec 273.10). To meet this requirement, a benefit card could not exceed level 4 conformity -- cards conforming at level 5 can not readily contain photographs. This regulation appears mainly intended to provide extra security at the issuance point in a coupon system, where issuance agents can be required to compare the photograph to the individual; regulations do not require retailers to verify the identity of a person presenting coupons, although they permit the retailer to ask to see the identification card. If retailers in an EBT system are not required to verify identity through photo comparison (and no such requirement existed in Reading), regulations might be changed to exempt EBT systems from the photo ID requirement. This would allow a State to use cards fully conforming to commercial system standards.

One possible regulatory strategy would be to require maximum conformity (level 5 above), but to allow this requirement to be waived if a State shows that such conformity would be unduly costly or would interfere with some other program objective. This strategy is particularly appealing if the added cost of full conformity would be small (which seems likely, at least in large systems). FNS might wish to analyze the probable cost implications of the varying levels of conformity before deciding what level to require.

Other System Components. For the most part, other system components do not appear to need regulations to require specific features (except as the

system's functional requirements or performance requirements already imply a need for certain features).

Two partial exceptions are the POS terminals and the system's communication protocols, for which the ABA draft POS guidelines offer some standards. It may be desirable for regulations to require explicitly that systems meet the applicable ABA standards in these areas -- the cost of meeting standards will be low, and it will help ensure compatibility.

3.2 SECURITY

Because the benefits in an EBT system have dollar value, the system must control the possibilities for theft, fraud, and accidental loss.

Two regulatory approaches exist for ensuring this control: holding the State liable for losses in a system it operates, and requiring the State to build specific security precautions into the EBT system. Regulations for the coupon system use both approaches, specifying that States are liable for coupon losses and mandating specific security measures. On the assumption that both approaches will also be taken with an EBT system, this section discusses possible security requirements; Section 2.3 considers the issue of liabilities.

Possible performance standards for security (and for the remaining topics covered in this section) are discussed in some detail in an earlier report.¹ This section therefore summarizes the standards only briefly and discusses possible regulatory approaches. The major security measures include:

Physical access controls

- Central computer facility in guarded or locked area, accessible only to authorized personnel.
- Local office workstations similarly restricted to authorized personnel.
- Secure storage for blank cards, destruction of used cards.

¹John A. Kirlin, Performance Standards for Electronic Benefit Transfer Systems (Draft). Cambridge, MA: Abt Associates Inc., December 1986.

- Secure storage for computer program listings and backup files.

Communications access controls

- Messages to central computer include code identifying originating terminal or workstation and terminal operator (grocery clerk, local office employee); verification that terminal is legitimate before proceeding.
- Use of dedicated lines, data encryption, or message authentication for all communications.
- Message validation for all issuance, POS transaction, and settlement communications.
- Recipient identity verification through PIN for all redemption transactions, and for crediting allotments to cards in off-line systems. PIN encryption on cards and in communications. Card "lockout" after a specified number of unsuccessful attempts to enter the PIN.
- Closure of potentially compromised recipient accounts (i.e., accounts corresponding to lost and stolen cards).
- Store identity verification through card and PIN for POS terminal sign-on and for all POS credits to recipient accounts.

Manually authorized purchase controls

- Recipient identity verification through card and signature.
- Retailer identity verification through account number and signature.
- Positive authorization based on recent account balance.
- Daily limit on value of manual transactions.

Administrative and operational procedures

- Separation of functions within computer center, with enforcement through software restrictions on access.
- Security screening of computer center employees before hiring.
- Periodic security reviews and briefings.

All of these security measures are intended to prevent losses from occurring. Reconciliation procedures, discussed in Section 2.1, are also an important part of an EBT system's security: they provide the main means of detecting and diagnosing a problem when it occurs.

Most of the security measures listed above are non-controversial. EBT systems would be likely to incorporate them without a specific regulatory requirement, but it would be reasonable to ensure their presence through regulation. Three points require policy consideration before inclusion in regulations, however: the means for securing data transmissions, the use of a recipient PIN, and the use of a store card and PIN.

It is reasonable to require that all data transmissions be secured by one of the three procedures noted earlier (dedicated lines, encryption, or message authentication). One might consider specifying particular security procedures for particular types of transmission. In general, for example, dedicated lines are expected to be too costly for application in an EBT system, with the exception of potentially high-volume linkages, such as that from the local office workstation to the computer center. Message authentication is less secure than data encryption, but is generally considered to provide an acceptable level of security for transaction authorizations. Despite these general expectations, a particular system design may make one security approach or another more appropriate, so it may be desirable to leave the regulation somewhat flexibly constructed.

Requiring PIN use by recipients could raise two types of objections. Some members of the commercial POS community -- particularly some merchants -- oppose the use of PINs as too burdensome for the consumer and an unnecessary addition to the cost of terminals. Others feel that alternative technologies, such as electronic verification of signatures or thumbprints, are more appropriate. A third possible objection, that the PIN would be too difficult for a population of food stamp recipients, was largely laid to rest by the absence of problems in the Reading demonstration.

These objections notwithstanding, several factors argue for the PIN's appropriateness. Reading recipients did not find the PIN too burdensome. Moreover, they valued the extra security they felt the EBT system offered relative to coupons, security that depends largely on the PIN. The PIN is

currently the most widely accepted form of identify verification: the ABA's draft POS guidelines require a PIN, and standards for PIN encryption have been specified by the American National Standards Institute. Biometric identification may come to be more widely used in future years, but currently is a higher-cost and less commonly applied technology. The most reasonable regulatory options, therefore, are either simply to mandate the PIN, or to require the State to use either the PIN or, with approval, some other card-linked electronic identity verification procedure.

The third issue concerns the use of store cards and PINs. These are not common features of commercial POS systems, and were the source of some (relatively minor) complaints from retailers in Reading. Using the store card and PIN for refunds is mainly a protection for the retailer; regulations might reasonably omit this requirement on the assumption that a State can tailor the system to meet the preference of its participating retailers. The terminal sign-on requirement prevents unauthorized use of the terminals. It is probably desirable to require some protection against unauthorized terminal use, but regulations might allow the State to propose a method rather than requiring the store card and PIN.

Finally, it should be noted that off-line systems pose special security risks not addressed in the above list, which was developed assuming an on-line approach. For example,

- If a recipient's card is altered or fails in some way that prevents the balance field from being re-written, the recipient might continue to make purchases indefinitely.
- A counterfeit card corresponding to no legitimate account but incorporating the system's PIN algorithm and other security marks might be used indefinitely.

One approach to these particular problems is the "hot list," a list of problematic account numbers maintained by each POS terminal and updated daily. Because no off-line systems have been implemented, however, it is not clear whether the hot list is either an economically feasible approach (it might make terminals prohibitively costly) or a sufficient protection against the risks. In off-line systems in particular, then, it will be important for

regulations to require the State to submit a complete security plan, which FNS must review in light of the particular system's characteristics.

3.3 PROCESSING TIME

The length of time a customer and cashier spend waiting for an EBT purchase to be authorized is a very important factor in retailer and recipient acceptance of the system. Based on the Reading experience, a standard of 32-44 seconds has been recommended¹ for an EBT purchase transaction (including transaction set-up activities such as entering the card into the reader, communication and processing activities, and receipt printing). Separate recommendations cover various components of transaction time, such as the computer's internal processing time.

The recommendation above reflects the observed capacity of the Reading system, but different system designs could lead to different expectations of system performance. For example, transaction times of about 20-25 seconds were reported by supermarkets participating in commercial POS systems in Florida and Iowa.² No consistent industry standards for transaction time exist. Nonetheless, because merchants continually press for quicker transactions and network operators perceive response time as a key competitive factor, expectations for system performance will probably grow more demanding over the next few years.

Although States will need to establish standards for transaction time as parameters for system design, it is not clear that specific processing time standards should be incorporated in federal regulations. From the Food Stamp Program's point of view, any processing speed is acceptable if it is acceptable to the system's participants (including retailers, recipients, and any commercial POS networks with which the system is integrated). The only danger in not establishing a national standard is that a State might fail to anticipate what its participants will find acceptable, or might not know how to specify the standard meaningfully.

¹Kirlin, op. cit.

²Kirlin and Hamilton, op. cit.

The Reading experience provides a perspective on what retailers found acceptable in that environment, but several factors could cause different expectations in other environments. For example, off-line systems would be expected to process transactions more quickly than on-line systems, and might therefore need tighter standards. Processing speeds might also have to be faster in piggybacked systems, where a greater proportion of a retailer's transactions will be affected by the system's processing time and where the commercial system may itself have standards.

Given these complicating factors, regulations might require only that States establish explicit standards for transaction times. FNS could then make available supplementary information and technical assistance to help the States determine what aspects of transaction processing require standards and what times might be acceptable.

Time standards might be established for other EBT transactions besides the purchase. Examples are recipients' telephone inquiries about their balances and transactions originating at the local food stamp office workstation, both of which are covered in the Performance Standards report referenced earlier. The nature of these transactions may vary substantially from system to system, however, and their processing times are less central to acceptability of the EBT system. Hence it appears appropriate not to establish specific regulations in these areas.

3.4 SYSTEM RELIABILITY

The acceptability of an EBT system to its participants also depends on system reliability. The participant's view of reliability is determined by the frequency with which intended transactions cannot be completed in the normal manner.

What appears to the participant to be a system failure, of course, may be the failure of any single system component: the card, the POS terminal, the communications system, the central computer, etc. Regulations might incorporate standards for each such system component.

It does not appear that establishing national standards in this area would be useful, for two reasons. Most importantly, variations in EBT system design can mean that different standards should be used. For example, an off-

line system does not use the central computer in normal transaction authorization, so establishing a high up-time standard for this equipment may not be relevant. (Regulations could specify an up-time standard for the central computer in on-line systems only; a standard of 99.5 percent is suggested in the previous report). Benefit cards provide another example. Even within the realm of magnetic stripe cards, wide variation in card composition is possible, and a State might reasonably choose a card with a relatively short expected lifetime in order to curtail costs or to maintain compatibility with other cards used in the program. Even if design variations were not an issue, the Performance Standards report indicated that, for several important system components, no reasonable basis exists for establishing specific reliability standards.

Processing accuracy may be the exception, an area in which a nationally regulated reliability standard may be desirable. An EBT system must process transactions accurately, regardless of system design. Regulations might require that an EBT system process a very high percentage (e.g., 99.9 percent or more) of all transactions accurately, including purchases and other POS transactions, credits to recipient accounts, and funds transfers to retailer accounts. Instances of inaccurate processing are revealed by reconciliation procedures and by the recipients and retailers whose accounts are affected. The Reading experience and that of commercial systems indicates that a 99.9 percent standard should be easily met, and 99.99 percent would not be unreasonable.

3.5 SYSTEM CAPACITY

Several dimension's of an EBT system's capacity may be important to its overall performance. These include communications capacity (in particular, how many incoming calls the central computer can accept at the same time), processing throughput (how many transactions the system can process per minute), and data storage (how many records can be stored in the various system files). In each case, the key issue is not the absolute level of the system's capacity, but whether capacity is sufficient for the needed level of system use.

System capacity is probably not an appropriate point for national regulation. The Food Stamp Program has no direct interest in system capacity,

only a concern that insufficient capacity should not cause problems with transaction time or system reliability. The wide possible variation in system design would make it difficult to establish generally applicable standards. Differences in operational practices about system upgrades are also likely--for example, commercial POS operators may proceed in a more modular fashion than States--which means that different capacity standards would be applicable even in similarly designed systems. Given these considerations, regulations may reasonably omit any specification of capacity standards.

3.6 USER CONVENIENCE

Recipients' and retailers' views of an EBT system will depend on how easy they find it to use. The Performance Standards report identifies a number of system characteristics that help to maximize ease of use for each group.

For recipients, an EBT system is easier to use if:

- The number of separate actions required to complete a transaction is minimized;
- The number of codes or commands the recipient must memorize is minimized;
- Clear and comprehensive account balance information is readily available;
- Actions required to obtain account balance information are minimized;
- Training and instructions are clear, and in-process prompts are available; and
- Procedures for resolving problems are clearly identified.

The equivalent list of characteristics to enhance retailer ease of use includes:

- Minimum number of separate actions needed to perform a normal purchase transaction;
- Minimum number of procedures for cashiers to remember;
- Clear training, instructions, and in-process prompts;
- Simple backup procedures when electronic purchases are impossible;

- Timely information on bank deposits resulting from EBT purchases;
 - Deposit information readily comparable to information normally maintained in the store; and
 - Clear instructions on how to resolve problems with ~~equipment and accounts~~
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It is unclear whether regulations should attempt to ensure participant ease of use. A few of the items on the above list imply the need for particular functions to be performed (e.g., training), and these have been included in the functional specifications discussed in Section 2.1. For the remaining items, the extent to which a system has maximized ease of use is largely a matter of subjective judgement. If such principles were to be included in regulations, therefore, they would be difficult to enforce. On the other hand, incorporating them in regulations could provide a useful guidepost to States by directing their own judgement to the adequacy of a design in these respects. Policy makers should therefore determine whether regulations should provide user convenience guidelines, or whether this information is best provided as technical assistance.

CHAPTER FOUR

DELEGATION OF EBT-RELATED RESPONSIBILITIES

State Food Stamp Agencies are responsible for administering most aspects of Food Stamp Program operations. Regulations permit them to delegate some of this responsibility, however. Some States, for example, delegate much of the responsibility to county governments. More germane to the current discussion, States typically use contractual relationships to delegate responsibility to private entities. Coupons are issued in many States by banks or other private organizations, operating under contract to the State or county. Many States contract with private firms to develop or modify major electronic data processing systems, or to service or even operate ongoing systems.

The Reading demonstration illustrates several types of contractual delegation. In the original demonstration, a private contractor (Planning Research Corp.) designed and developed the system, and carried out most system functions. The State food stamp agency assumed many of these responsibilities in the extended demonstration, but still contracted out software design work (to MTech and Unisys) and some service functions (to Unisys). Settlement functions were delegated in both the original and the extended demonstration to the Federal Reserve's Automated Clearing House and to a local commercial bank that initiated the ACH transmission.

The existence of commercial POS systems poses even broader opportunities for delegation through "piggybacking." If a private firm is already operating a hardware, software, and communications network that carries out functions similar to those of an EBT system, a State may be able to purchase the performance of EBT functions. For example, food stamp recipients might be allowed to make purchases using their benefit cards in the existing POS terminals in supermarkets. The State would perform some of the functions of the EBT Center in Reading, authorizing transactions and maintaining accounts, but would not be responsible for the terminals or for communications with them.

In the extreme case, the EBT system could be wholly integrated into the commercial POS system. The State's only direct responsibility would be to determine households' benefit allotments, and give that information to the network operator. The operator would issue benefit cards to recipients and

train them; credit benefit allotments to recipient accounts; install and maintain terminals at retail establishments; process purchase and related transactions, debiting and crediting recipient and retailer accounts; initiate funds transfers; handle all recipient and retailer problems with cards, terminals, and account balances; conduct reconciliations; and provide management reports. The only other responsibility for State or federal food stamp agencies would be to conduct monitoring and audit activities as necessary to make sure the network operator is carrying out EBT functions properly.

These various possibilities raise several questions for regulation:

- Should regulations prohibit or restrict the delegation of any functions to private entities?
- What liabilities should regulations establish for States and entities to which they delegate EBT functions?
- What financial arrangements are allowable between States and other entities participating in an EBT system?
- What procurement and contracting procedures are required for States to delegate EBT-related responsibilities?

These issues are discussed in turn in the sections below.

4.1 ALLOWABLE DELEGATION

Existing food stamp regulations have established the principle that States may delegate the performance of some issuance functions to other public or private entities. Some States accordingly contract with issuance agents to provide coupons to recipients after appropriately verifying the recipient's identity and allotment amount by means of an ATP or on-line authorization. In support of this function, issuance agents maintain an inventory of coupons and are responsible for reporting on issuances and on inventory levels.

Extending the principle to electronic systems requires a determination of which functions may appropriately be delegated. It is useful for this discussion to consider the following groups of functions:

- Development and initial implementation of the system;
- Deploying and maintaining point-of-sale terminals;
- Deploying and maintaining issuance terminals (for crediting allotments to recipients' benefit cards in off-line systems);

- Deploying and maintaining coupon-dispensing terminals (in systems with this feature);
- Authorizing purchases (in on-line systems);
- Maintaining the accounts that recipients access to use their benefits (in on-line systems);
- Capturing data on POS transactions for subsequent settlement and archiving;
- Routing transaction authorization requests and transaction records to the appropriate destination;
- Initiating or conducting settlement;
- Maintaining records of all transactions;
- Generating reconciliation and management reports.

Regulations might restrict the delegation of any or all of these functions if the delegation would violate any existing law or regulation, if it could create a conflict of interest situation, if it could interfere in the competition of entities in the private market, or if it would not be cost-beneficial for the program or for recipients. These possibilities are reviewed in turn below.

Existing law and regulation pose no apparent obstacle to delegating any or all EBT functions. The Privacy Act generally prohibits an agency from making individuals' records available, except with written consent, to anyone but agency employees and other government agencies. Although several EBT functions involve such records, a private entity carrying out the functions would be an agent of the government--analogous to issuance agents in the coupon system.

A conflict of interest could conceivably arise if certain functions were delegated to a food retail organization. For example, a supermarket chain operating a POS network might be a logical candidate for a piggyback relationship. A conflict of interest might exist if that chain were made responsible for deploying terminals in competing stores, or if the responsibility included initiating settlement for itself or for other stores. Regulations might therefore prohibit the delegation of settlement-related responsibilities to food retail organizations, and allow such organizations to

be responsible for terminal deployment and maintenance only for affiliated establishments. This would be analogous to current regulations essentially precluding retailers from acting as issuance agents.

Competitive balance may prove a delicate issue because the POS industry is currently very volatile as well as very competitive. Because of the high proportion of food retailers participating in the Food Stamp Program, contracting with a particular commercial POS network to operate an EBT system might in some situations be tantamount to guaranteeing the success of that network and dooming its competitors within the area. This risk must be seen in perspective, however: many large government contracting efforts have analogous potential impacts.

The key issues concern on-going operations -- in particular, what stores are affiliated with what networks in a piggybacked system. A policy decision is required to choose among several possible regulatory approaches, including:

- Simply requiring all delegation of EBT functions to follow normal competitive procurement rules;
- Requiring States to subdivide the universe of recipients or stores in the EBT system so as to award more than one EBT contract, where feasible;
- If a POS operator is contracted to perform EBT functions in "new" stores -- i.e., stores that were not served by that operator before the contract was awarded -- the operator could be required to allow any proprietary card organization or network to purchase services on those terminals equivalent to some or all of the services purchased by the Food Stamp Program, at fair market rates (in other words, the operator can not exclude competitors from the new stores).

Cost-effectiveness would provide grounds for regulatory restrictions only if there were reason to believe that private entities could not be expected to carry out particular EBT functions as well or as cheaply as State agencies (or vice versa). One can point to areas in which greater experience resides with the State agency (e.g., training recipients) or with POS operators (e.g., deploying terminals). Even in these situations, however, it is quite plausible that either kind of organization could perform the function appropriately and economically. Hence, no restrictions are currently suggested by cost-effectiveness considerations.

4.2 LIABILITIES

Existing regulations hold States liable for losses of coupons. They further require that, if a State delegates coupon issuance responsibilities to an issuance agent, the State must hold the agent liable for losses. Losses are defined to include coupons missing from inventory and certain types of improper issuance.

It seems reasonable for equivalent liabilities to exist in an electronic system. A policy decision will be required, however, to specify the kinds of losses for which States and their contractors should be liable. Consider the following possible loss situations:

- A recipient's account is over-credited, the recipient uses the benefits, and they are not recovered;
- A recipient receives replacement benefits to cover an unauthorized use of benefits in the recipient's account;¹
- A recipient goes into an overdraft situation as a result of a manually authorized transaction, and the benefits are not recovered;
- A retailer account is over-credited and the funds can not be recovered;
- Funds are transferred to an illegitimate account and can not be recovered.

In some of these examples, the cause of the problem could lie either inside or outside the system. For instance, a grocer account could be over-credited through a system error or because the grocer tampered with the system. A transfer to an illegitimate account might be accomplished by an operator in the EBT Center or by an outsider who penetrates the system.

If a State has any liability for losses, it will first be liable for losses clearly arising from its own actions, such as an accidental over-crediting. It is less clear whether the State should be liable for losses that occur legitimately under program rules (i.e., the unrecoverable overdraft from a manual transaction), or for losses arising from the actions of recip-

¹As noted earlier, policy is needed to determine whether such replacements will be made, and hence whether this type of loss can exist.

ients, retailers, or outside parties. The general argument against imposing liabilities in such situations is that the State can not control the actions leading to the loss, and hence should not be held responsible. The counter-argument is that the State is responsible for implementing the security measures intended to prevent such losses, and that determining the cause of each loss in order to assess liabilities would generate more cost than benefit.

For any given type of loss, the question is whether the liability shall be borne by the State, the federal government, or a combination.¹ Although regulations related to coupon issuance give each liability either entirely to the State or entirely to the federal government, examples of shared liability can be found elsewhere in the Food Stamp Program. In the case of certification error, for example, USDA assumes full liability for the first five percentage points of a State's payment error rate, but the cost of erroneous issuances beyond that level is shared.

Once the State's liability is defined, the spirit of current regulations would pass that liability on to any organization to which the State delegates EBT responsibilities. It will be difficult for regulations to specify such liabilities, however. The nature of contractor liabilities will depend on the design of the system and which functions the contractor performs. The key functions with associated liabilities are:

<u>Function</u>	<u>Liability</u>
Crediting allotments to recipient accounts	Over-credits and credits to unauthorized accounts
Maintaining recipient accounts, authorizing transactions (on-line systems only)	Overdrafts, unauthorized debits to recipient accounts
Accumulating transaction records for settlement	Over-credits to retailer accounts, transfers to fictitious accounts

¹Some types of potential "losses" may be the recipients' liability, such as the loss or theft of coupons. These situations do not lead to taxpayer costs in excess of the intended issuance, and hence are not considered as losses for the purpose of assigning institutional liability.

Given the potential complications of differing patterns of delegation across States, it may be most useful for regulations simply to require the State to hold its contractor liable for any losses associated with the functions the contractor performs (assuming that the State is liable for those losses).

Financial Arrangements

The multitude of possible delegation patterns implies a wide variety of potential financial arrangements.

A State might contract for the performance of any combination of the functions discussed on a "job price" basis. That is, the State would award a fixed price or cost reimbursable contract to carry out the specified functions until completion (e.g., for system development) or for a specified time period (for most ongoing functions). Job price contracts are particularly likely if a contractor is given overall responsibility for developing an EBT system or for operating most aspects of the system -- i.e., if the contractor has a comprehensive set of responsibilities similar to those of PRC in Reading.

If a State retains the central responsibility for operating a system, but delegates certain ongoing functions, "unit price" contracting is likely. Possible unit pricing arrangements include:

<u>Function</u>	<u>Pricing Basis</u>
Recipient card issuance	Card
Routing transactions	Transaction
Transaction authorization	Transaction
Recipient account maintenance and reporting	Account
Terminal deployment	Terminal/transaction
Terminal maintenance	Terminal/transaction
Accumulating transaction data for settlement	Terminal/retailer
Settlement initiation	Settlement item
Settlement reporting to retailers	Retailer

As the list indicates, there are numerous possible bases for pricing. Moreover, actual arrangements might define variations on these units. For example, the bank initiating settlement in the Reading system received a daily fee based on the expected average number of settlement items (i.e., separate deposits to retailer accounts) in each day's tape.

If some pricing arrangements would clearly be less cost-effective than others, regulations might preclude the less desirable arrangements. Experience to date is so limited, however, that no particular arrangements can be shown to be clearly preferable or clearly inappropriate. Similarly, experience is too limited to support guidelines or ceilings on the allowable price levels for these various functions.

The major financial concern with EBT systems is not the price of component functions, but the overall cost of the system. This is not necessarily a topic for regulation: existing reimbursement arrangements, in which the State pays half of most administrative costs, provide a strong incentive for the State to limit the cost of an EBT system. On the other hand, FNS might be legitimately be concerned that State administrators could be misled by promises of efficiency from vendors wishing to sell EBT equipment or services.

If regulation is desired to limit this risk, it might adopt the approach taken in extending the Reading demonstration, which established a per-issuance ceiling for costs subject to federal reimbursement. The ceiling might be established either in terms of absolute dollars (e.g., \$4 per issuance) or relative to a State's costs for its coupon system (e.g., the EBT system should have per-issuance costs no more than 30 percent higher than coupon costs). In either case, it is important for the regulation to specify all of the functions whose costs must be included in the total (e.g., all of the functions described in Section 2.1 above for the EBT system, and parallel functions in the coupon system).

Financial arrangements in an EBT system may not be limited to the State's payment of contractors: in certain circumstances, the State might receive payments as well as make them. These circumstances include "reverse piggybacking" and retailer cost sharing.

Reverse piggybacking can occur if a private entity wishes to use some aspect of a State's EBT system. The most likely possibility is that retailers, banks, or commercial POS networks will want to use EBT grocery terminals to authorize some other kind of financial transaction (debit or credit card purchases, check authorizations, or manufacturer's coupon discounts). The EBT system might simply make the terminal available for use, and have it dial up a different number for non-EBT transactions, or the EBT system might provide a range of services including routing the transaction to a destination, data capture, transaction authorization, and settlement.

Although the coupon system contains no analogy to reverse piggybacking, current regulations establish no principles that would preclude it. Indeed, the concept of reverse piggybacking is attractive as a means of reducing the government's cost of operating the system. For the government to sell services of a type also offered by private vendors raises difficult policy questions, however. Among the potential pitfalls are:

- The EBT system might underprice commercial POS system operators. Because the marginal cost to the EBT system of performing the extra transactions would be extremely low, the system might cost-effectively offer POS services at prices below market rates. This could provoke charges of unfair competition from the private vendors. Pricing services based on average rather than marginal costs could involve complicated accounting (to take into account capital costs, etc.), and again could diverge from market prices.
- The State might inadvertently price non-EBT services at a level below their marginal cost, leading to an increase rather than a reduction in costs to the Food Stamp Program. This might result from inaccurate measurement of costs or inaccurate estimation of new costs associated with serving the commercial user.
- The EBT system might upset the competitive balance among private entities, particularly if it established an exclusive relationship with one organization out of a group of competitors.
- Performing non-EBT transactions might detract from the quality of service provided to the Food Stamp Program. This might occur, for example, if the additional uses required modifications leading to more complicated purchase procedures for recipients, or if the format or schedule of system reports on food stamp activity had to be altered.

To respond to these concerns, regulations might specify a series of conditions under which a State could sell EBT system services to private entities. These conditions might be: that the State maintain separate records of all costs and revenues associated with performing non-EBT functions; that EBT system services must be priced no lower than the marginal cost of providing them or the prevailing market rate, whichever is higher; that EBT system services must be made available on a non-exclusive basis; and that any failure to meet all requirements for Food Stamp Program operations will result in termination of the State's permission to make EBT system services available to outside entities.

Cost sharing with retailers poses a somewhat different set of issues. Here the concept is that retailers, in order to participate in the EBT system, would have to pay part of the cost of system operations. The coupon system has no explicit analogy to this concept; although the idea of a "participation fee" has occasionally been raised, it has never been adopted. In fact, retailers do incur costs in the coupon system--mainly the cost of accepting, handling, and depositing the coupons--and these are in some sense equivalent to a participation fee. The 1982 amendments to the Food Stamp Act of 1977 explicitly prohibit imposing any costs of alternative issuance systems (i.e., EBT systems) on participating retailers. If cost-sharing is desired, then, it will probably require new legislation--legislation that retailers will strongly oppose.

If cost sharing occurs, the first question to be resolved is how the cost burden shall be apportioned among retailers. Several different approaches could be used to establish fee levels:

- A flat one-time or monthly fee for each retailer establishment. This has the advantage of simplicity, but does not closely relate fees either to system costs or to retailer benefits.
- A fee based on the number of terminals in a store, or the number of transactions per month. These approaches relate the fee to system costs, with higher fees in the establishments that generate higher costs. With somewhat greater complexity one could relate the fee quite directly to costs by basing it partially on a fixed cost per store, partly on a cost per terminal, and partly on a cost per transaction.

- A fee based on the dollar value of redemptions in a store each month. This relates retailers' payments to the benefit they derive from the system.

Any of these approaches could be argued to be fair, and there is no basis in current regulations, Food Stamp Program practices, or commercial POS practices for mandating one particular approach. Practices in commercial debit card systems vary widely. Sometimes the retailers own and maintain the terminals in their stores, and sometimes banks or network operators deploy the terminals. Depending in part on whether they own the terminals, retailers may or may not pay a transaction fee, and in some cases are even paid a fee for the use of the terminals. Debit card systems typically have per-transaction fees, but fees in credit card systems are a percentage of the transaction value. Given this diversity of commercial practices, cost sharing in the Food Stamp Program might use any of the approaches outlined above.

The main concern with any cost-sharing approach is that a substantial proportion of retailers might consider it no longer in their interest to participate in the Food Stamp Program, thus reducing recipients' ability to use their benefits. Obviously, the risk of this outcome depends on the amount of the fee. Moreover, any fee approach is likely to be perceived more unfavorably by some kinds of retailers than others. For example, convenience stores will probably be strongest in opposing a fee based on transaction volume, because their food stamp transactions have a very low average purchase value. Conversely, supermarkets will most strongly oppose a fee based on the value of redemptions because they have the highest average purchase amounts. If a cost sharing approach caused most establishments of one type to withdraw from the Food Stamp Program, recipients' opportunities to use their benefits might be seriously curtailed.

Accordingly, regulations might require that an EBT system with cost sharing must retain the participation of a specified proportion (e.g., 75 percent) of all establishments in a particular category that were participating before the introduction of the EBT system. Failure to maintain this level would result in an FNS review of the extent to which recipients' ability to use their benefits is compromised; the review could mandate modification of the cost-sharing approach. Such a regulation would have to be carefully structured to avoid the possibility that retailer organizations would orchestrate a general refusal to participate, knowing that the outcome would be

elimination of the cost sharing provision. Two factors may be key here. First, the mandatory participation rate should be low enough that a relatively small proportion of retailers could not block the system. Second, the FNS review should occur only after a period of operation (e.g., 6 to 12 months) to make it clear that retailers feel strongly enough about the fees to forego their food stamp sales.

If an EBT system is integrated with a commercial POS system, the cost-sharing considerations may be somewhat different. In this scenario, the commercial network offers the retailer an array of services, including the processing of food stamp transactions. The network's formal procedures for terminal deployment and for transaction fees would presumably apply. The Food Stamp Program would not be involved in this process, but would pay the network operator the normal fee charged to card-issuing institutions.

The difficulty in this scenario is likely to arise with stores that wish to accept food stamps but are not interested in the other network services. If the network procedure is for retailers to buy and maintain their own terminals and pay a transaction fee, the retailer is in the same position as if the Food Stamp Program required retailers to purchase terminals and pay transaction fees. It is unclear whether this arrangement would be prohibited by existing legislation. It would certainly be strongly opposed by retailers uninterested in the network's non-food stamp services (i.e., not already participating in the commercial system), and in most areas of the country today such retailers are probably the majority of the establishments participating in the Food Stamp Program.

FNS must therefore explicitly consider whether this form of indirect cost-sharing is to be allowed, and frame regulations accordingly. Particular consideration should be given to the situation of the retailer who wants to accept food stamp benefits but would not otherwise participate in the commercial system, maintaining consistency between regulations covering that retailer and those covering retailers in non-integrated EBT systems.

Procurement and contracting procedures. Current Food Stamp Program regulations include general requirements for procedures to be followed in establishing contracts whose costs will be subject to federal reimbursement (Section 277.14). These regulations would apply to State procurements of contracts to develop an EBT system or operate ongoing EBT functions. An EBT

system has no special characteristics that would require modification of these regulations.

A special set of regulations governs the establishment of Automatic Data Processing systems for which FNS reimburses 75 percent of the development and installation costs (Section 277.18). The regulations require additional prior approvals (by means of an Advance Planning Document) beyond what is required for other procurements, and specify certain functional standards for qualifying systems. The functional specifications include some issuance-oriented requirements (mainly for generating allotment authorizations and performing reconciliations) that have some relationship to functions an EBT system performs.

Whether Section 277.18 should apply to EBT systems--in particular, whether EBT system development should be eligible for 75 percent funding--is clearly a policy decision. Enhanced funding is a tool for encouraging States to make major investments that FNS believes will improve program performance and that States might not make with the normal 50 percent reimbursement. If EBT systems do not fall into this category, the regulations may need some slight modification to exclude EBT systems explicitly. If EBT systems are to be eligible for enhanced funding, the regulations will have to be modified to make this clear and to define any special conditions of eligibility (beyond those system requirements appearing elsewhere in the regulations).

Appendix A

SUMMARY OF PERTINENT FOOD STAMP PROGRAM REGULATIONS

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As background to the report, existing regulations for the Food Stamp Program were reviewed in some detail. The primary purpose of the review was to identify principles in the regulations that might apply, directly or by analogy, to an EBT system. In addition, the review attempted to identify language in the existing regulations that would be inappropriate for an EBT system, such as using the term "coupons" instead of the more generic "benefits."

This appendix briefly summarizes the results of the review, and may be useful as background to an effort to frame specific EBT-related regulations.

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
271.5	Coupons as obligations of the U.S.; crimes and offenses	coupons are an obligation of the U.S.; penalties for misuse; security requirements.	coupons=benefits throughout section	(c) Security for coupons and ATP's. - security requirements for all entities contacting coupons.
271.6	Complaint procedure	outline of procedures governing the handling of program complaints from participants.	none	none
271.7	Allotment reduction procedures	outline of procedures governing the reduction, suspension or cancellation of monthly allotments.	none	(c) Reduction method. - amount of reduction specified by FMS (d) Implementation of allotment reductions. - procedures for reducing, suspending and cancelling allotments. (e) Effects of reductions, etc., on the certification of eligible households. (2) Expedited service. - reduction or suspension procedures for households with expedited services (g) Issuance services. - issuance services to serve households receiving restored or retroactive benefits for a prior, unaffected month.

PART 272 - REQUIREMENTS FOR PARTICIPATING STATE AGENCIES

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to <u>Electronic Systems</u>
272.1	General terms and conditions	outline of terms and conditions relevent to Part 272	coupons=benefits (a), (b)	none
272.2	Plan of operation.	Guidelines for planning and budgeting of program operations and objectives.	none	(b) Federal/State Agreement - FNS agreement to pay administrative costs in accordance with the Food Stamp Act. (c) Budget Projection Statement and Program Activity Statement - Budget Projection Statement projects total costs for major areas of program operations. Program Activity Statement is a summary of program activity.
272.3	Operating guidelines and forms.	Preparation of written oper- ating procedures to staff respon- sible for program administration.	none	(a) Categories to be included: certification; issuance, accountability and reconciliation; the Performance Reporting System; and training

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
272.4	Program administra- tion and per- sonnel req- uirements.	hiring guidelines (U.S. Civil Service requirements)	none	(d) Training - continuing training program for employees - sufficient training of employees
272.5	Program informational activities.	outlines minimum requirements of State agency	none	none
272.6	Nondiscrim- ination req- uirements.	outlines State responsibilities and complaint procedures	none	none
272.7	Procedures for program administration in Alaska.	additional reg- ulations designed to achieve efficient and effective FSP administration in rural Alaska	none	none

PART 273 - CERTIFICATION OF ELIGIBLE HOUSEHOLDS

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
273.1	Household concept.	definition of household	benefits=coupons (b)(iii), (e), (f)(1)(ii), (f)(1)(iii) (f)(2)(i), (f)(2)(ii), (f)(4)(i), (f)(4)(ii), (f)(4)(iii)	(f) Authorized representatives. - allows designation of any responsible household member to act on behalf of the household
273.2	Application processing.	outlines procedures for application	benefits=coupons (g)(2), (i)(3)(i), (i)(3)(ii), (k)(1)(N)	(g) Normal processing standard. - sets maximum of 30 days for application processing (i) Expedited service. - requirements for expedited service
273.3	Residency.	residency requirements	none	none
273.4	Citizenship and alien status.	citizenship requirements for participation	none	none
273.5	Students.	eligibility of students	none	none
273.6	Social security numbers.	requirements of social security enrollment	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
273.7	Work registration requirements.	requirements for work registration	none	(g) Failure to comply. - treatment of households failing to comply with work requirements (h) Ending disqualification. - provisions for resumption of benefits
273.8	Resource eligibility standards.	definitions of what are considered resources in calculating eligibility	none	none
273.9	Income and deductions.	income requirements	none	none
273.10	Determining household eligibility and benefit levels.	procedure for calculating eligibility and benefit levels	none	(a)(1)(iv) verification and certification periods for those households requiring expedited service (a)(4) guidelines for changes in allotment levels due to changing HH circumstances during cert. period (e)(3) Destitute households. - destitution classification for expedited service (g)(3)(ii) Mandatory photo ID cards. - used in those project areas with > 100,000 recipient unless otherwise designated (g)(3)(iv) Specially marked ID cards. - used for those recipients receiving delivered food services, communal dining facilities, or eligible to purchase hunting and fishing equipment

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
273.11	Action on households with special circumstances.	treatment of special case households	benefits=coupons (h)(8), (i),	(h)(8) Overissuance due to incorrect sponsor information. - liability of recipient for overissuance due to incorrect information about alien sponsor (i) Households requesting replacement allotments or ATP's. - procedures for replacements of ATP's or coupons following household disasters
273.12	Reporting changes.	reporting requirements when household circumstances change	none	(c) State agency action on changes. - guidelines for State agency action for changes in eligibility or allotment following changes in household circumstances
273.13	Notice of adverse action.	requirements of State agency to notify households prior to any adverse action	none	none
273.14	Recertification.	procedures for recertifying household eligibility	none	none
273.15	Fair hearings.	hearing procedures for households aggrieved by any State action affecting eligibility	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
273.16	Disqualification for intentional program violation.	guidelines for disqualifying households	none	(b) Disqualification penalties.
273.17	Restoration of lost benefits.	guidelines for restoring benefits to households	none	(f) Method of restoration - State agency shall restore lost benefits to a household by issuing an allotment equal to the amount of benefits lost (h) Accounting procedures - State must document restoration of lost benefits
273.18	Claims against households.	overissuance claims procedures	(d)(ii)(3) Initiating collection on claims. (g) Method of collecting payments. (k) Accounting procedures. All three areas should include mention of electronic systems. Benefits=coupons throughout the section.	procedures for adjusting benefits when overissued either intentionally or unintentionally
273.19	[Reserved]			
273.20	SSI cash-out States.	outline of procedures to be followed in those States which increase SSI payments to include the value of the food stamp allotment	none	Procedures for adjustment of benefits for those recipients in cash-out states. These states allow the value of the food stamp allotment to be included with SSI payments.

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
273.21	Monthly Reporting and Retrospective Budgeting (MRRB).	provisions for an MRRB system for determining household eligibility and benefits	none	(k) Issuance of benefits - guidelines for issuance cycles (about the same time monthly)
273.22	Optional workfare program.	outlines rules to be followed in operating a Food Stamp Workfare Program	none	(f)(6) Failure to comply. - guidelines for procedures States are to follow if recipient fails to comply with work requirements

PART 274 - ISSUANCE AND USE OF FOOD COUPONS

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.1	State agency issuance responsibilities.	outlines basic issuance requirements of state agencies	benefits=coupons (a)	<p>(a) Basic issuance requirements.</p> <p>Each state agency is responsible for:</p> <ul style="list-style-type: none"> - timely and accurate issuance - assistance to elderly and handicapped - establishing issuance and accountability system to insure that: <ul style="list-style-type: none"> (i) only certified households receive benefits; (ii) coupons are accepted, stored and protected after delivery; (iii) program benefits are accurately and timely distributed; and (iv) coupon issuance and reconciliation activities properly conducted <p>(b) Contracting or delegating issuance responsibilities.</p> <ul style="list-style-type: none"> - outline responsibilities of other parties contracted for issuance and storage of coupons, i.e., liability, conflict of interest, review procedures, etc. <p>(d) State monitoring of duplicate issuance.</p> <ul style="list-style-type: none"> - state must establish a system assuring that no individual participates more than once per month in the FSP

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.2	Issuance systems.	Outlines 3 allowable issuance systems: (1) ATP (2) HIR (3) Direct Mail	No allowance for electronic issuance systems	<p>(b) Advance planning documentation.</p> <ul style="list-style-type: none"> - states must comply with procurement requirements for acquisition, design, development or instal- <p>(c) Certification documentation.</p> <ul style="list-style-type: none"> - States shall use either a notice of change or HIR card to document and transmit information on household eligibility or participation from the certification unit to the data management unit <p>(d) HIR master file.</p> <ul style="list-style-type: none"> - States shall establish an HIR master file which is the composite of the issuance records of all certified food stamp households <p>(e) ATP issuance.</p> <ul style="list-style-type: none"> - information required on ATP documents - monthly issuance cycles requirements - expiration of ATP guidelines - treatment of rejected ATP's in preparation - delivery of ATP to household guidelines - security and controls for undeliverable ATP's - designation of authorized representatives - presentation of identification prior to coupon issuance - accountability of initial, supplemental and replacement ATP's - daily reconciliation by issuers - replacement of coupons for those improperly manufactured or mutilated

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.2	cont'd.			<p>(f) HIR issuance</p> <ul style="list-style-type: none"> - outline of procedures and responsibilities with HIR issuance <p>(g) Expedited service.</p> <ul style="list-style-type: none"> - manual preparation of ATP's at local level to speed up benefit delivery - misuse minimization procedures: <ul style="list-style-type: none"> (i) division of ATP issuance responsibilities (ii) HIR file update - state checking for duplicate issuance - procedures to expedite HIR issuance <p>(h) Replacement of an ATP stolen or lost in the mail prior to receipt.</p> <ul style="list-style-type: none"> - ATP's replaced only if stolen or lost in the mail prior to receipt and in the period of its intended use and if the household has not already been issued 2 replacements in previous 2 months <p>(i) Issuance of coupons to households.</p> <ul style="list-style-type: none"> - guidelines for coupon book issuance, e.g., consecutive serial numbers, recipient signature, etc.

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.3	Issuance of coupons through the mail.	guidelines for issuing coupons through the mail	benefits=coupons throughout	<p>(b) Mail issuance controls and records.</p> <ul style="list-style-type: none"> - establishment of mail issuance log to record requests for mail issuance - division of responsibility in inventory control and mailing preparation - prevention of duplicate issuances - use of first class mail - issuance staggering - timely delivery <p>(c) Coupons lost in the mail prior to receipt.</p> <ul style="list-style-type: none"> - procedures for handling mail losses
274.4	Distribution of coupons.	procedures for the handling, requisition, shipment, and inventory of coupons	benefits=coupons throughout	<p>(b) Coupon controls.</p> <ul style="list-style-type: none"> - state and principals take necessary actions to: <ul style="list-style-type: none"> (i) safeguard coupons from theft, embezzlement, loss, damage, or destruction; (ii) avoid unauthorized transfer, negotiation, or use of coupons; (iii) promptly report in writing any loss, theft or embezzlement of coupons
274.5	Responsibilities of coupon issuers and bulk storage points	procedures to be maintained by coupon handlers for receipt, inventory management and reporting	benefits=coupons throughout	<p>(e) Improperly manufacture of mutilated coupons.</p> <ul style="list-style-type: none"> - issuers write cancelled across booklets and forward them to the state

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.6	Reconciliation.	issuance reconciliation procedures	no provision for electronic issuance	<p>(a) Verification of ATP issuance.</p> <ul style="list-style-type: none"> - verify transacted ATP's received by state with total value of coupon issuances - unreconciled ATP batches left intact until resolved <p>(b) Reconciliation of ATP's with HIR master file.</p> <ul style="list-style-type: none"> - minimum requirements: compare each ATP to total coupon allotment <p>(c) Identification of unreconciled ATP's.</p> <ul style="list-style-type: none"> - all unreconciled ATP's identified as expired, duplicate, altered, stolen, counterfeit or out-of-state must be reported to FNS <p>(d) HIR reconciliation to the case files.</p> <ul style="list-style-type: none"> - in HIR issuance systems, semi-annual comparison of active and inactive HIR cards against the case files
274.7	Issuance record retention and security.	security procedures for issuance records	no provision for electronic issuance	<p>(a) Availability of issuance records.</p> <ul style="list-style-type: none"> - shall be attained for 3 years <p>(b) Control of issuance documents</p> <ul style="list-style-type: none"> - shall control all issuance documents which establish household eligibility while the documents are transferred and processed within the state agency

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to Electronic Systems
274.7	cont'd.			<p>(c) Accountable documents.</p> <ul style="list-style-type: none"> - Include: <ul style="list-style-type: none"> (i) HIR cards (ii) ATP's (iii) mandated photo ID cards - the state shall provide the minimum security for these: <ul style="list-style-type: none"> (i) preprinted serial numbers (ii) secure storage (iii) access limited to authorized personnel (iv) bulk inventory control records (v) subsequent control records maintained through point of issuance or use (vi) periodic review and validation of inventory controls and records by parties not otherwise involved in maintaining control record <p>(d) Notice of change and ID card security.</p> <ul style="list-style-type: none"> - state shall at a minimum provide secure storage and limit access to authorized personnel
274.8	State agency reporting require- ments and unusable throughout destruction of coupon destruction coupons.	benefits=coupons		<p>(a) State agency reporting.</p> <ul style="list-style-type: none"> - state shall report changes in project area, reconciliation point, or coupon shipment receiving point - FNS-250 shall be reviewed monthly by state - state shall submit FNS-259, Food Stamp Mail Issuance Report for each project area using a mail issuance system - FNS shall review each FNS-250 submitted through the state agency - state reporting of reconciliation of transacted ATP's against the HIR master file - FNS-388 regarding coupon issuance and participatio

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.8 cont'd.				(b) Destruction of unusable coupons. - state responsible for destroying all unusable coupons
274.9	Close-out a coupon issuer.	procedures for closing out coupon issuers	none	(a) Definition of responsibilities. - state responsible for all activities (b) Close-out accountability. - within 30 days of termination and reported to FNS (c) Transfer of coupon inventory. - transferred to other issuer within project area (d) Maintenance of participant service. - recipients notified of closing and provided with identification of alternative issuance locations
274.10	Use or redemption of coupons by eligible households.	outline of eligible benefit uses	benefits=coupons throughout	(a) Eligible food. - benefits must be used for eligible food unless otherwise allowed, e.g., cash change, Alaska, (b) Meals-on-wheels. - use of benefits allowed (c) Communal dining. - use of benefits allowed in some cases (d) Institutional food. - use of benefits allowed in some cases (e) Alaskan hunting/fishing equipment. - use of benefits allowed in some rural locations

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
274.10	cont'd.			(f) Use of ID cards. - must be provided upon request (h) Cash change. - allows up to \$.99
274.11	Return of coupons	procedures for refunding coupons by recipients	benefits=coupons no provisions for clearing of elect- ronic accounts	Refunds allowed in the event of voluntary termination of participation or death of the head of the household

PART 275 - PERFORMANCE REPORTING SYSTEM

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to Electronic Systems
Subpart A - Administration				
275.1	General scope and purpose.	outlines administrative roles of state agency; FNS funding	none	<p>(a) State agency responsible for:</p> <ul style="list-style-type: none"> - administration of FSP in accordance with the Act, Regulations and the State agency's plan of operations - state shall have a system for monitoring and improving its administration of the program - state shall report to FNS on its' administration - failure without good cause to meet program requirements will result in suspension/disallowance of administration funding <p>(b) Funding</p> <ul style="list-style-type: none"> - Secretary shall pay each state 50% of all administrative costs - pay 60% if cumulative allotment error rate is less than 5%
275.2	State agency responsibilities.	responsibilities for performance reporting and staffing standards	none	<p>(a) Establishment of the performance reporting system.</p> <ul style="list-style-type: none"> - components include: <ul style="list-style-type: none"> (i) data collection through management evaluations (ME) and quality control (QC) review (ii) analysis and evaluation of data from all sources (iii) corrective action planning (iv) corrective action implementation and monitoring (v) reporting to FNS on program performance - state shall designate a person on a full-time basis to these activities

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
275.3	Federal monitoring.	Federal PRS review responsibilities	none	<p>(a) Reviews of State agency's administrative operation of the FSP.</p> <ul style="list-style-type: none"> - conducted annually, includes certification and issuance procedures, security and control procedures, accountability, reconciliation, record keeping and reporting procedures, training, outreach, complaint procedures, fraud, fair hearings, disaster preparedness, state agency supervision of the functions performed by the project area including bilingual services, standards for points and hours and a review of the plan of operation and the state manual. <p>(c) Validation of State agency error rates.</p> <ul style="list-style-type: none"> - Active case error rate <ul style="list-style-type: none"> Includes: <ul style="list-style-type: none"> (i) payment error rate (ii) underissue error rate (iii) negative case error rate

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
275.4	Record retention.	records FNS requires for review	none	PRS records (3 year retention): <ul style="list-style-type: none"> - information used in data analysis - corrective action plans - corrective action monitoring records - ME review records - QC review records
Subpart B - Management Evaluation (ME) Reviews				
275.5	Scope and purpose.	outlines objectives, none frequency and manner of conduct of reviews	none	(a) Objectives. <ul style="list-style-type: none"> - provide a systematic method of monitoring and assessing program operations - provide a basis to improve and strengthen operation - facilitate information flow between project areas the states and FNS - frequency of review from once/year to once/3 years depending on project area size
275.6	Management units.	criteria for management units to be reviewed	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
275.7	Selection of sub-units for review.	defines and identifies sub-units; criteria for review	benefits=coupons	none
275.8	Review coverage.	areas to be covered in reviews	benefits=coupons	(a) Program requirements. - review of all areas of program operations specified below: (b) certification requirements. (c) issuance requirements. (d) distribution of coupons. (e) reporting/recordkeeping. (f) reconciliation. (g) security/control. (h) complaints procedures. (i) points and hours. (j) outreach. (k) personnel requirements.
275.9	Review process.	outlines procedures and methods for reviews	none	none
Subpart C - Quality Control (QC) Reviews				
275.10	Scope and purpose.	outlines objectives of QC reviews	none	Active case review to determine if households are eligible and receiving the correct allotment of food stamps.

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
275.11	Sampling.	outlines sampling plan for QC reviews	none	none
275.12	Review of active cases.	review procedures for active cases	none	none
275.13	Review of negative cases.	review procedures for those cases dropping out or not certified	none	none
275.14	Review processing.	use of FNS hand-books, worksheets, and schedules in QC review process	none	none
Subpart D - Data Analysis and Evaluation				
275.15	Data management.	methods of analysis and evaluation	none	none
Subpart E - Corrective Action				
275.16	Corrective action planning.	determination of appropriate actions to reduce or eliminate program deficiencies	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
275.17	State correct-ive action plan.	state plans to reduce or eliminate deficiencies	none	none
275.18	Project area/man-agement corrective action plan.	lower level corrective action plan-ning	none	none
275.19	Monitoring and eval-uation.	guidelines for state monitoring and evaluations of state and project area level corrective action plans	none	none
Subpart F - Responsibilities for Reporting on Program Performance				
275.20	ME review reports.	review schedules for performance of ME reviews	none	none
275.21	Quality control review reports.	reporting require-ments following QC reports	none	none
275.22	State corrective action plans.	schedule for submittal of plans	none	none

Section <u>Number</u>	<u>Title</u>	General <u>Purpose</u>	Language Not Allowing Electronic <u>Systems</u>	Principle Potentially Applicable to <u>Electronic Systems</u>
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275.23	Admin- istrative procedure.	program performance report submittal requirements	none	none
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Subpart G - Program Performance

275.25	Determination of state agency program performance.	FNS determination of agency effec- tiveness and effect- iveness	none	Efficiency and effectiveness criteria: <ul style="list-style-type: none"> - state compliance with the standards contained in the Food Stamp Act regulations, FNS-approved State manuals and the State Plan of Operation - State efforts to improve program operations through corrective action - State performance reporting systems and corrective action efforts - Other available information
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PART 276 - STATE AGENCY LIABILITIES AND FEDERAL SANCTIONS

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
276.1	Respon- sibilities	outlines state agency's rights and responsibil- ities	benefits=coupons	<p>(a) Responsibilities.</p> <ul style="list-style-type: none"> - establishing and maintaining secure control over coupons and cash - for preventing losses of Federal funds in the certification of households for participation - efficiently and effectively administering the Program by complying with the provisions of the Act, regulations issued pursuant to the Act, and the FNS-approved State Plan of Operation <p>(b) Rights.</p> <ul style="list-style-type: none"> - to appeal all claims brought against them by FNS
276.2	State agency liabilities.	responsibilities of State agency to FNS for any financial losses involved in the acceptance, storage issuance of coupons	benefits=coupons	<p>(b) Coupon shortages, losses, unauthorized issuances and overissuances.</p> <ul style="list-style-type: none"> - States liable for: <ul style="list-style-type: none"> (i) shortages and losses after coupons have been accepted by the State (ii) thefts, embezzlements, cashier errors, coupons lost in natural disasters, mail issuance losses in excess of tolerable levels, losses due to unexplained causes (iii) acceptance of expired ATP cards, out-of-State ATP cards, duplicate issuances where photo I cards are used, acceptance of lost, stolen or embezzled ATP cards, duplicate issuances caused by state error (iv) overissuances due to failure to suspend or cancel allotments, overissuances due to court orders or settlement of a lawsuit not reported to FNS, overissuances resulting from an out-of-court settlement in violation of Federal law

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
276.3	Negligence or fraud.	liability of State to FNS for allotment amounts issued when there has been negligence or fraud on the part of the state in certification	none	none
276.4	Suspension/disallowance of administrative funds.	suspension or disallowance of administrative funds for inefficiency or ineffectiveness of State's administration	none	none
276.5	Injunctive relief.	Secretary may seek injunctive relief when FNS determines State failure to comply with regulations	none	none
276.7	Good cause.	outlines good cause for failure to comply with regulations	no provisions for electronic issuance	none
276.8	Administrative review process.	outlines FNS appeal process	none	none

PART 277 - PAYMENTS OF CERTAIN ADMINISTRATIVE COSTS OF STATE AGENCIES

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
277.1	General purpose and scope.	establish uniform requirements for the management of administrative funds provided to State agencies and sets forth principals for claiming costs of activities paid with administrative funds	none	none
277.2	Definitions	relevant terms defined	none	none
277.3	Budgets and budget revision procedures.	state agencies must submit a budget to FNS as part of the State Plan	none	none
277.4	Funding.	sets allowable cost standards for activities of agencies in administering the FSP	none	(b)(3) Funding of demonstration projects approved will be at a rate agreed to by FNS in accordance with Part 282
277.5	Methods of payment.	FNS methods for authorizing funds for State agencies	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
277.6	Standards for financial management systems.	prescribes standards for financial management systems in administering program funds by the State and its subagencies or contractors	none	none
277.7	Cash deposit-ories.	guidelines for deposits of funds	none	none
277.8	Bonding and insurance.	guidelines for bonding and insuring practices	none	none
277.9	Adminis- trative costs principles.	prescribes specific policies and procedures governing State agencies for funding	none	none
277.10	Program income.	defined as the gross income resulting from activities financed with program funds	none	none
277.11	Financial reporting requirements.	requirements for the State agencies to report financial information to FNS	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
277.12	Retention and custody of records.	all financial records, supporting documents, statistical records, negotiated contracts, and all other records pertinent to program funds shall be retained for three years	none	none
277.13	Property.	prescribes policies and procedures governing title, use, disposition of real and personal property for which acquisition costs were borne as a direct charge to FNS funds	none	<p>(b) Nonexpendable personal property.</p> <ul style="list-style-type: none"> - title shall vest in the State agency - shall be used in the program as long as there is need for such property - shall be used in other programs when no longer needed - disposed of according to regulation <p>(c) Transfer of title to certain property.</p> <ul style="list-style-type: none"> - if FNS determines property is unique, difficult or costly to replace, FNS may reserve the right to require the State to transfer title to the Federal Government or to a third party name by FNS <p>(d) Property management standards.</p> <ul style="list-style-type: none"> - property records shall be maintained accurately - a physical inventory taken once per two years - controls to ensure adequate safeguards to prevent loss, damage, or theft to the property - adequate maintenance to keep the property in good working condition - proper sales condition to keep in good condition

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to Electronic Systems
277.14	Procurement standards.	standards and guidelines for the procurement of supplies, equipment, con- struction and	none	<p>(b) Review of proposed contracts.</p> <ul style="list-style-type: none"> - state agencies shall submit proposed contracts and related procurement documents to FNS when: <ul style="list-style-type: none"> (i) procurement is greater than \$10,000 and is to be awarded without competition; (ii) procurement in excess of \$10,000 specifies a
		other services whose cost is borne by FNS		<p>'brand name' product</p> <p>(iii) state's procurement procedures fail to comply with this section</p> <p>(c) Code of conduct.</p> <ul style="list-style-type: none"> - conflict of interest guidelines <p>(d) Procurement procedures.</p> <ul style="list-style-type: none"> - shall be established to avoid the purchase of unnecessary or duplicative items <p>(e) Contracting with small and minority firms, women's business enterprises and labor surplus area firms.</p> <ul style="list-style-type: none"> - shall be awarded a fair share of contracts <p>(f) Selection process.</p> <ul style="list-style-type: none"> - promotes maximum and free competition <p>(g) Procurement methods.</p> <ul style="list-style-type: none"> - made in one of the following methods: <ul style="list-style-type: none"> (i) small purchase procedures (ii) competitive sealed bids (iii) competitive negotiation (iv) noncompetitive negotiation <p>(h) Contract pricing.</p> <ul style="list-style-type: none"> - state shall perform some form of cost or price analysis in connection with every procurement action <p>(i) State agency procurement records</p>

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to Electronic Systems
277.14	cont'd.			<p>(j) Contract provisions.</p> <ul style="list-style-type: none"> - shall contain provisions allowing for administrative, contractual, or legal remedies to contract breaching - shall contain suitable conditions for termination - comply with Equal Employment Opportunity regulation - comply with 'Anti-Kickback' regulations - comply with Labor and Safety laws - contain notice of FNS reporting and print rights requirements - shall define role of FNS - comply with environmental legislation - shall comply with energy conservation efforts <p>(k) Contract administration.</p> <ul style="list-style-type: none"> - left up to states
277.15	Food stamp investigations and prosecutions.	establishes standards and procedures for Federal funding of State and local costs of intentional program violations, prosecutions and administrative disqualifications	none	none
277.16	Suspension, disallowance, and program closeout.	procedures for FNS to adjust funding of states failing to comply with regulations	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
277.17	Audit requirements.	audit requirements for states	none	none
277.18	Establishment of an Automatic Data Processing (ADP) and Information Retrieval System	guidelines for establishing ADP and IRS systems	no provision for POS issuance	(a) General. <ul style="list-style-type: none"> - 75% funding for approved projects - submission of an Advance Planning Document required - approval if system will: <ul style="list-style-type: none"> (i) assist the agency in meeting the requirement of the Act (ii) meet the conditions of this section (iii) improve efficiency and effectiveness (iv) be compatible with other such systems (c) Program functional standards. <ul style="list-style-type: none"> - system must at a minimum meet the following program standards: <ul style="list-style-type: none"> (i) certification (ii) issuance, reconciliation and reporting (d) Compatibility. <ul style="list-style-type: none"> - must be integrated with AFDC unless excepted - systems will contain, where appropriate, a data base, an information retrieval system, hardware, software, and technological safeguards and managerial procedures

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to <u>Electronic Systems</u>
277.18	cont'd.			<p>(e) Prior approval process.</p> <ul style="list-style-type: none"> - must have feasibility studies or APDs approved - funding of development and hardware procurement and installation will follow prior approval - APDs will include cost distribution budgets - funded costs limited to development and installation - funded costs do not include ongoing costs - FNS will notify state of the budget authority and dollar limitation under which approved funding may be claimed - complete system and acquired hardware will be used for a period of time consistent with the approved APD <p>(f) Cost elements.</p> <ul style="list-style-type: none"> - personnel - materials, equipment, facilities and supplies - contracted services - management studies and other planning <p>(g) Cost determination.</p> <ul style="list-style-type: none"> - determined in compliance with an FNS-approved budget <p>(h) Specification</p> <ul style="list-style-type: none"> - specifications for system hardware components, software and services purchased from commercial suppliers must be included in ADP

PART 278 - PARTICIPATION OF RETAIL FOOD STORES, WHOLESALE FOOD CONCERNS AND INSURED FINANCIAL INSTITUTIONS

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
278.1	Approval of retail food stores and wholesale food concerns.	outlines application process and determination of authorization	none	none
278.2	Participation of retail food stores.	outlines procedures for retail food stores to accept and redeem benefits	benefit=coupons no provisions for electronic issuance and delivery	(a) Use of coupons. - may be accepted only in exchange for eligible items (b) Equal treatment of coupon customers. - must not discriminate FSP recipients (c) Accepting coupons. - may not accept coupons marked 'paid,' 'cancelled,' or 'specimen' or coupons removed from booklets other than in \$1 denominations (d) Making change. - cash change allowed \$.99 or less (e) Accepting coupons before delivery - coupons can only be accepted upon delivery (f) Paying credit accounts. - may not be accepted in payment for any eligible food sold to a household on credit (g) Redeeming coupons. - may be exchanged for face value upon presentation through the banking system or through an authorized wholesale food concern (h) Identifying coupon users. - retailers have right to request ID card (i) Checking meal delivery service recipients.

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
278.3	Participation of whole-sale food concerns.	guidelines for accepting and redeeming coupons by wholesalers	benefits=coupons	(a) Accepting coupons. <ul style="list-style-type: none"> - may accept endorsed coupons from authorized retailers, etc., if accompanied by properly filled out redemption certificate (b) Accepting legally obtained coupons. <ul style="list-style-type: none"> - can not accept if believe coupons were not legally obtained (c) Redeeming coupons. <ul style="list-style-type: none"> - may redeem coupons, properly accepted from retailers, through the banking system, upon presentation of the coupons with: <ul style="list-style-type: none"> (i) properly filled-out and signed redemption certificate from the retailer; and (ii) the authorized wholesale food concerns properly fill-out and signed redemption certificate
278.4	Procedure for redeeming coupons	procedure to be followed by retailers and wholesalers in redeeming coupons	benefits=coupons no provision for electronic redemption	(a) Coupons accepted without authorization. <ul style="list-style-type: none"> - may not be presented for redemption (b) Endorsing coupons. <ul style="list-style-type: none"> - stores shall mark its authorization number or name on each coupon (c) Using redemption certificates. <ul style="list-style-type: none"> - must be properly filled out and signed

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
278.5	Participation of insured financial institutions.	roles of financial institutions in redeeming coupons	benefit=coupons no provision for wire transfer or electronic deposits	(a) Accepting coupons <ul style="list-style-type: none"> - must be insured by FDIC or FSLIC - coupons must be properly endorsed - financial institution shall verify the amount of the coupon on the redemption certificate - redemption certificates shall be forwarded with the corresponding coupon deposits to the Federal Reserve Bank along with the transmitting Food Coupon Deposit Document (Form FNS-521) - redeemed coupons must be indelibly canceled (b) Role of the Federal Reserve Bank <ul style="list-style-type: none"> - will receive canceled coupons for credit to the account of a member insured financial institution and will charge those items to the general account of the Treasurer of the US (c) FNS liability for losses. <ul style="list-style-type: none"> - not liable for the value of any coupons lost, stolen, or destroyed while in the custody of an insured financial institution or the Federal Reserve Bank (d) FNS use of coupons to detect violations. <ul style="list-style-type: none"> - coupons may be issued to, purchased by, or redeemed by persons authorized by FNS to use them in examining and inspecting program operations (e) Selling coupons to stores for internal checks. <ul style="list-style-type: none"> - FNS may sell coupons at face value to any authorize store which wishes to use coupons to conduct internal checks of coupon transactions.

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
278.6	Disqualification of retail food stores and wholesale food concerns, and imposition of civil money penalties in lieu of disqualification.	procedures for disqualifying participating stores due to program offenses and penalties for offenses	no provision for putting store account on hold as would be the case with electronic issuance	Adjustment of store accounts
278.7	Determination and disposition of claim - retail food stores and wholesale food concerns.	procedures for imposing claims on stores found in violation of regulations; coupons accepted without authorization	none	(c) Coupons accepted without authorization. - FNS officer in charge may approve the redemption of coupons prior to receipt of an authorization card (g) Lost or stolen coupons. - FNS may not be held liable for claims for lost or stolen coupons
278.8	Administrative review - retail food stores and wholesale food concerns.	grievance procedure outline	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
278.9	Implementation of amendments relating to the particip- ation of retail food stores, wholesale food concerns and insured finan- cial institutions.	various related amendments	none	none

PART 279 - ADMINISTRATIVE AND JUDICIAL REVIEW - FOOD RETAILERS AND WHOLESALE FOOD CONCERNS

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to Electronic Systems
Subpart A - Administrative Review - General				
279.1	Scope and purpose.	outlines the subparts of Part 279	none	none
279.2	Food stamp review officer.	outlines designation and assignments of officer	none	none
279.3	Authority and jurisdiction.	review officer acts for department on grievances filed by firms and is the final administrative determination of the Department	none	none
279.4	Rules of procedure.	refers to subpart B	none	none
Subpart B - Rules of Procedure				
279.5	Manner of filing requests for review.	procedures for requesting reviews	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
279.6	Content of request for review.	requirements for identifying and supporting the request	none	none
279.7	Action upon receipt of a request for review.	procedural guide- lines following submission	none	none
279.8	Determination of the food stamp review officer.	basis for decision of review officer	none	none
279.9	Legal advice and extension of time.	review officer may consult with OGC; may grant time extensions	none	none
Subpart C - Judicial Review				
279.10	Judicial review.	grievant may appeal determination in the U.S. district court	none	none
279.11	Implementation of amendments relating to administrative and judicial review.	effective date of Amendment No. 257	none	none

PART 280 - EMERGENCY FOOD ASSISTANCE FOR VICTIMS OF DISASTERS

Section <u>Number</u>	<u>Title</u>	General <u>Purpose</u>	Language Not Allowing Electronic <u>Systems</u>	Principle Potentially Applicable to <u>Electronic Systems</u>
280.1	Interim disaster procedures.	guidelines for temporary standards of eligibility for households who are victims of a disaster	none	none

PART 281 - ADMINISTRATION OF THE FOOD STAMP PROGRAM ON INDIAN RESERVATIONS

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
281.1	General purpose and scope.	regulations governing the operation of the Food Stamp Program on Indian reservations	none	none
281.2	Adminis- tration.	qualification of Indian tribal organizations (ITO); requirement of state service plan; project area designation; and contracts with ITOs	none	none
281.3	Determin- ation of failure.	procedures for determining states failure in adequately administering the FSP on reservations	none	none
281.4	Determining Indian tribal organization capability.	criteria for ITO capability to administer FSP on reservation if wished by ITO	none	none

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to Electronic Systems
281.5	Responsibilities of an Indian tribal organization designated as State agency.	administrative responsibilities of ITO	none	none
281.6	Liabilities and sanctions.	ITOs subject to same liabilities and Federal sanctions as State agencies	none	none
281.7	Indian tribal organization failure.	PRS reviews to determine failure of ITO administration	none	none
281.8	Transfer of program administration.	transfer of program administration to/from ITO to/from state agency	none	none
281.9	Funding.	75% funding of all approved administrative costs	none	none
281.10	Appeals.	appeals guidelines and procedures	none	none

PART 282 - DEMONSTRATION, RESEARCH, AND EVALUATION PROJECTS

Section Number	Title	General Purpose	Language Not Allowing Electronic Systems	Principle Potentially Applicable to <u>Electronic Systems</u>
282.1	Legislative authority.	outlines legis- lative authority of the Secretary in setting up: - demonstrations; - research projects; and - evaluation projects	none	(a) Demonstration projects. - designed to test program changes that might increase the efficiency of the food stamp program and improve the delivery of food stamp benefits to eligible households - the Secretary is authorized to waive all or part of the requirements of the Act and implementing regul- ations necessary to conduct such projects (b) Research projects. - undertake research that will help improve the administration and effectiveness of the food stamp program in delivering nutrition related benefits (c) Evaluation projects. - develop and implement measures for evaluating, on an annual or more frequent basis, the effectiveness of the food stamp program in achieving its stated objectives
282.2	Project initiation.	sources of project initiation	none	The Secretary shall, from time to time, publish a list of priority areas being considered for demonstration, research, and evaluation efforts, and invite and consider public comment on such lists.
282.3	Eligibility.	eligibility criteria for grants	none	States or public or other nonprofit agencies or organ- izations or individuals are eligible for grants
282.4	Approval of prop- osals.	procedures and criteria for proposal approval	none	(a) Presubmission proposal review. - all suggestions for project operations and formal proposals are subject to OMB circular A-102

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
282.4	cont'd.			<p>(b) Federal procedures.</p> <ul style="list-style-type: none"> - reviewed by a panel of FNS and departmental reps - representatives from other departments may participate - proposal shall be ranked on criteria outline in (c) <p>(c) Approval criteria.</p> <ul style="list-style-type: none"> - responsiveness to the specific requirements contained in the notice of intent or RFP - conceptual development and clarity of measurable objectives - probable effectiveness to achieve the objectives - capability of the applicant to conduct the project - projected cost - potential benefits - relationship to other demonstration, research or evaluation projects
282.5	Public notice procedures for demonstration projects.	procedures for publishing general notices, and amended general notices	none	none
282.6	Federal financial participation.	Federal financial commitments	none	<p>(a) Level of funding.</p> <ul style="list-style-type: none"> - Grant Awards: FNS shall pay all costs up to the level established at the award - Contracts: FNS shall pay all costs as established in the terms of the contract - Additional funding: subject to existing Federal grant and contracting procedures <p>(b) Limitations.</p> <ul style="list-style-type: none"> - Federal financing limited to those projects awarded by FNS, up to the amount approved in the grant or contract and costs incurred during the projects as established in the grant or contract

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
282.10	Workfare demonstration project.	outlines authority, none purpose, areas of operation, criteria for participation, conditions of employment, state agency responsibilities, and compliance monitoring for workfare demonstration projects		none
282.11	California SSI conversion project.	outlines altern. certification and issuance procedures to improve delivery of benefits to the aged, blind, and disabled in California	none	none
282.12	SSI/Elderly cash-out demonstration project.	outlines cash-out project for elderly and handicapped persons.	none	none
282.13	Work registration/job search demonstration project.	outlines requirements for work registration programs	none	none

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
282.14	Pennsylvania food stamp direct delivery demonstration project.	outlines project where ATPs are sent to issuance sites rather than to households	none	none
282.15	[Reserved]			
282.16	Monthly reporting/retrospective accounting demonstration project.	outlines demonstration project where participating households will be required to submit a monthly report as condition for eligibility	none	none
282.17	Monthly reporting/retrospective accounting: Operational procedures.	outlines administrative and operational procedures for states using this system	none	none
282.18	AFDC/Food stamp consolidation demonstration project.	coordinates AFDC and food stamp benefits	none	none
282.19	Simplified Application Demonstration project.	allows households to jointly apply for several assistance programs	none	none

PART 284 - PROVISION OF A NUTRITION ASSISTANCE PROGRAM FOR THE COMMONWEALTH
OF THE NORTHERN MARIANA ISLANDS (CNMI)

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
284.1	General purpose and scope.	describes the terms and con- ditions under which FSP funds shall be provided by FNS to the CNMI	none	none
284.2	Authority.	FNS authority outline	none	none
284.3	Memorandum of under- standing.	basis for nutritional assistance	none	none
284.4	Failure to comply.	penalties for failure to comply	none	none
284.5	Technical assistance.	extended by FNS	none	none

PART 285 - PROVISION OF A NUTRITION ASSISTANCE GRANT FOR THE
COMMONWEALTH OF PUERTO RICO

<u>Section Number</u>	<u>Title</u>	<u>General Purpose</u>	<u>Language Not Allowing Electronic Systems</u>	<u>Principle Potentially Applicable to Electronic Systems</u>
285.1	General purpose and scope.	describes the terms and conditions under which grant funds shall be provided by FNS to Puerto Rico	none	none
285.2	Funding.	FNS provides 100% grant funds	none	none
285.3	Plan of operation.	required for funding	none	none
285.4	Approval.	FNS must approve plan of operation	none	none
285.5	Records and reports.	PR must submit all records required in plan of operation	none	none
285.6	Audits.	PR shall provide an audit of expenditures	none	none
285.7	Failure to comply.	penalties for failing to comply	none	none
285.8	Review.	FNS discretion	none	none
285.9	Technical assistance.	may be provided by FNS	none	none

Section <u>Number</u>	<u>Title</u>	General <u>Purpose</u>	Language Not Allowing Electronic <u>Systems</u>	Principle Potentially Applicable to <u>Electronic Systems</u>
285.10	Termination of the Food Stamp Program in the Common- wealth of Puerto Rico.	criteria for terminating program	none	none

Appendix B

ABA GUIDELINES FOR POS SYSTEMS

Appendix B
ABA GUIDELINES FOR POS SYSTEMS

Financial institutions and retailers have implemented numerous projects in recent years involving on-line, debit card systems for customer payment for goods and services at the point of sale. These projects, however, incorporate different (and often incompatible) technical systems and procedures for processing point of sale (POS) transactions. When such incompatibility occurs, debit cards issued for one system cannot be used at POS terminals deployed for another system.

In an effort to encourage development of systems which will be compatible with one another, the American Bankers Association (ABA) organized a committee in 1985 to develop guidelines for how on-line, direct debit systems should work. The committee included members of the four "national" debit card organizations -- Cirrus System Inc., MasterCard International, Inc., Plus System Inc., and VISA U.S.A. Inc. The committee released draft guidelines for industry comment in July 1986.¹ Final guidelines are expected to be released in August or September 1987.

Although the ABA draft guidelines incorporate numerous references to standards adopted by the International Organization for Standardization (ISO) and the American National Standards Institute (ANSI), the guidelines go beyond the technical standards adopted by these two organizations. That is, the guidelines address the common procedures to be followed in on-line, debit card systems as well as areas where technical standards must be followed to ensure inter-system compatibility.

The underlying philosophy behind the guidelines' recommendations is that:

- The issuer, or its agents, must authorize each debit transaction (i.e., zero floor limit--no transaction can be accepted without issuer authorization);

¹"Implementation Guidelines for Online Debit Card Systems at the Point of Sale," American Bankers Association, Payment Systems Policy Board, Retail Payments Task Force, Ad Hoc Committee, July 9, 1986.

- Each debit transaction must include a customer-entered PIN;
- Each debit transaction is a function of a magnetically-read stripe;
- The acquirer has the option of allowing the merchant to have the cardholder sign a transaction receipt;
- Each financial transaction approval response causes the interchange system to effect settlement between the acquirer and the issuer;
- A customer's receipt is made available to the cardholder to signify the consummated transaction; and
- The issuer guarantees that the funds for the amount of the approved interchange transaction will be paid and settled at the end of the settlement day.

The final ABA guidelines are likely to be supported by the banking industry, inasmuch as they have been developed by industry representatives and subjected to a prolonged period of industry review and comment. Some retail industry groups, however, have expressed concern with a few of the draft guideline's recommendations (e.g., the recommendation that each debit transaction must include a customer-entered PIN). Although the guidelines committee has considered comments from retail groups in preparing the final guidelines, it is not yet clear whether the final guidelines will receive the full support of the retail industry. Nevertheless, without having an alternative set of retailer-developed guidelines to be considered, the ABA guidelines are likely to exert considerable influence on future debit card system developments.

The ABA guidelines, therefore, are the only effort to date to develop national standards for on-line, direct debit point of sale systems. If developers of future Electronic Benefit Transfer (EBT) systems for the Food Stamp Program wish to reduce administrative and operating costs by integrating their systems with commercial POS systems, it seems quite likely that the EBT systems will need to conform to the final guidelines implemented by the ABA. Adherence to the ABA guidelines also should provide the technical ability for EBT participants in one state to use POS terminals at grocery stores in another state, a possible advantage when implementing EBT systems in cities near state borders.

This appendix provides a review of the draft ABA guidelines, focusing on those aspects of the guidelines which are particularly relevant for consideration in future federal regulations for the Food Stamp Program. The appendix also notes areas in which the final guidelines may differ from the draft guidelines, based on comments and articles found in recent industry trade publications.

The draft guidelines are organized along seven major topics:

- 1) Responsibilities of card issuers;
- 2) Responsibilities of terminal deployers;
- 3) Transaction processing;
- 4) Security;
- 5) Settlement;
- 6) Error resolution; and
- 7) Down-time procedures.

Each topic is discussed in a separate section of this appendix.

B.1 RESPONSIBILITIES OF CARD ISSUERS

The ABA draft guidelines discuss five major responsibilities of card issuers, dealing with (1) the use and characteristics of a standard access card, (2) customer identifiers, (3) processing availability, (4) documentation of transactions, and (5) customer disclosures. For an EBT system, the State Agency would be considered the card issuer, although the agency could select a financial institution or other organization as its authorized agent for issuing cards or processing transactions.

Standard Access Card

If EBT cards are to be used in a POS interchange system, the characteristics of the card (i.e., material; size; shape; and positioning of the magnetic stripe, signature panel, and embossing) must conform to standards issued by the International Organization for Standardization (ISO). Relevant ISO standards for standard access cards are 1073/1, 1073/2, 7810, 7811, 7811/1, and 7811/2.

The card issuer must encode Tracks 1 and 2 of the card's magnetic stripe. Detailed information on the data which must be encoded (and their location on the magnetic stripe) is contained in Section 2.6.3 of the draft guidelines.

The draft guidelines state that the Primary Account Number (defined in the next section) must be embossed on the card. An inter-industry advisory group reviewing the draft guidelines is proposing that the cardholder's name and the card's expiration date also must be embossed. This proposal may or may not be adopted in the final guidelines.

Customer Identifiers

Primary Account Numbers (PANs) and Personal Identification Numbers (PINs) must be used to uniquely identify the customer using a debit card.

The PAN is used to identify the customer account relationship for POS interchange transactions. It must be encoded on both Track 1 and Track 2 of the magnetic stripe, and it must be embossed on the card. The PAN includes the Issuer Identification Number (IIN), which includes the issuer's Major Industry Identity (MII); the Individual Account Identifier (IAI); and a Check Digit (TCD).

The Issuer Identification Number (IIN) allows the acquirer (an institution which acquires from the card acceptor the financial data relating to a POS transaction and initiates those data into an interchange system) to distinguish the appropriate path to route a transaction for authorization and processing. A U.S. card issuer must apply to the American National Standards Institute (ANSI) for the assignment of an IIN in accordance with the procedures identified in ISO 7812. At present, no MII code (a part of the IIN) appears to exist for governmental agencies.

Each debit card must have a Personal Identification Number (PIN) associated with the PAN. The combination of the PAN and the PIN serve as the basis for authentication of the identity of the person using the card. Either the card issuer or the customer may select the PIN. It must contain from 4 to 12 characters, each character being either alphabetic or numeric.

Card issuers are responsible for assuring the confidentiality of the PIN at all times during card generation, card delivery/issuance, card storage,

PIN verification, and card destruction. The card issuer or its authorized agent is responsible for verifying the PIN prior to authorizing each transaction.

Processing Availability

The card issuer or its authorized agent is responsible for receiving and processing transactions from a POS terminal which are initiated with one of its issued cards. Processing capabilities must be available 24 hours a day, 7 days a week.

The draft guidelines do not specify system "uptime" requirements. An inter-industry advisory group is recommending that uptime requirements be set and that stand-in processing be mandated. (Stand-in processing allows an intermediate network facility, or switch, to compare a cardholder's identity against a negative file and to authorize the transaction if (a) the cardholder is not on the negative file, and (b) the card issuer cannot process the transaction at all or within a specified time period.) It is not known at the present time whether or not the final guidelines will adopt these recommendations.

Documentation of Transactions

To comply with the Federal Reserve Board of Governors Regulation E, each card issuer must be capable of providing to its cardholders monthly statements which detail the location of each POS transaction and the amount of the transaction.

Customer Disclosures

The PIN serves as an "electronic signature" in on-line, debit card systems, and each card issuer must disclose the limitations of liability associated with use of the PIN and debit card. Such disclosure must clearly inform the customer of his or her rights and responsibilities with regard to security and use of the PIN and any limitations which the card issuer will place on the customer when using the PIN. (The draft guidelines do not provide examples of possible limitations on use.)

The draft guidelines explicitly prohibit balance inquiry transactions at POS terminals operated by store clerks. The purpose is to prevent the disclosure of balance information to anyone other than the cardholder.

If the debit card allows access to more than one type of financial account (e.g., savings or checking), the card issuer must inform the customer which account will be accessed when transactions occur at POS terminals which cannot specify which account is to be accessed.

Finally, the card issuer must inform customers under what circumstances it will disclose information about the customer's account to third parties. The draft guidelines recommend that card issuers adopt the Federal Reserve Board Model Disclosure Form, which provides that disclosure will be made under four circumstances:

- 1) When it is necessary for completing transactions;
- 2) To verify the existence and condition of the customer's account for a third party;
- 3) To comply with government agencies or court orders; and
- 4) With the customer's written consent.

B.2 RESPONSIBILITIES OF TERMINAL DEPLOYMENT

The draft guidelines provide minimum requirements associated with the deployment of terminals in a debit card POS system. These requirements encompass operational procedures, transactions supported, and minimum hardware requirements.

Operational Procedures

The customer must be present to enter the PIN to initiate any transaction requiring PIN use. PIN use is required for all transactions affecting a cardholder's account except subsequent credits to the account which are generated as a result of a purchase return or a merchant/acquirer-generated correction.

The customer's card normally must be used, and the terminal equipment must be able to read the card. Card use is not required for subsequent credits to the cardholder's account.

The customer is the only person who may enter the PIN. Other information may be entered either by the customer or the merchant.

Both the customer and the merchant must have visual verification of the amount of the transaction. The customer must indicate approval of the transaction amount, either by pressing the appropriate terminal function key, by entering the PIN (if entered after visual verification of the amount), or by signing a merchant-retained receipt. The inter-industry advisory group acknowledges that visual verification is preferred, but it suggests that other acceptable methods of customer verification be allowed until existing POS equipment is upgraded to meet the visual verification requirement.

A receipt must be provided to the customer following each transaction. Manually provided receipts are allowed only at attended terminals where account selection is not offered. Section 3.1.7 of the draft guidelines provides a listing of information which must be printed on the receipt.

Standard response codes must be displayed or printed at the terminal. Section 3.1.8 of the draft guidelines provides a listing of the standard response codes for on-line, debit card systems.

All information required for processing the transaction must be captured at the point of sale and transmitted to the acquirer.

Transactions Supported

The following six transaction types must be supported at the point of sale:

- 1) Authorization - commits the card issuer to honor a subsequent purchase up to the amount specified, within a two-hour time limit;
- 2) Purchase (including cash back, if allowed);
- 3) Merchandize return;
- 4) Credit adjustment;
- 5) Balance inquiry; and
- 6) Cancel/void - may be operator initiated or generated as a result of terminal time-out; must occur before receipt is printed.

The requirement that balance inquiry transactions be supported, together with the previously mentioned requirement that balance inquiries may not occur at attended terminals, appears to indicate that unattended terminals must be available within the store. The draft guidelines, however, offer no explicit statement along these lines. It may be the case that access to account balance information from a regular touch-tone telephone (as available in the Reading EBT system) would meet this requirement.

Minimum Hardware Requirements

The POS terminal must be capable of reading either Track 1 or Track 2 of the magnetic stripe. If the stripe reader is inoperable, the merchant has the option of entering the account number from the embossed card. This condition must be recognized by the terminal and identified within the interchange message, as it may affect which party (or parties) is liable for errors.

The POS terminal must be able to accept and encrypt a 4 to 12 character PIN. The PIN must never be displayed "in the clear." The terminal must be capable of accepting changes to its encryption key on a periodic basis.

If the terminal's PIN-pad is inoperable, the merchant has the option of allowing the transaction. This condition must be recognized by the terminal and identified within the interchange message, as it may affect which party (or parties) is responsible for errors.

Terminals must be able to lock the keyboard (except for cancel or void entries) while a transaction is being processed. This will prevent multiple entry of data from a single transaction.

The draft guidelines recommend that every POS terminal have a "time-out" function set to no less than 45 seconds. The guidelines do not address maximum acceptable response times at the terminal. (Response time refers to the time which elapses between transmitting a transaction authorization request from the terminal to the network and the receipt at the terminal of an authorization message.) Recent reports, however, indicate that there appears to be a consensus that the final guidelines should address system response times. One industry group is proposing that 90 percent of all transactions be

responded to within 10 seconds, with the remaining 10 percent being responded to within 35 seconds.

In conjunction with the above proposal, there is a possibility that the final guidelines will drop the 45-second time-out standard altogether, or replace it with a standard that varies according to the number of nodes involved in processing or with transaction routing distance.

The terminal must be capable of displaying or printing a minimum of 16 alphanumeric positions to display transaction data and response messages.

Except at attended terminals which do not allow account selection, a printer must be attached to each POS terminal.

The draft guidelines recommend that -- if the merchant allows account selection -- the terminal provide separate function keys for each account type.

At terminals requiring card insertion, the terminal should retain the card when the response message is, "Pick Up Card." At other terminals, the merchant is expected to make a reasonable attempt to retain cards when receiving such messages.

The terminal must be able to recognize when a transaction has been completed and to generate a completion response back to the acquirer.

B.3 TRANSACTION PROCESSING

The ABA draft guidelines describe the cardholders' transactions that should be available in an on-line, debit card POS system and the "system transactions" that should be accommodated. The guidelines include descriptions of the transaction types that can be supported, message types, message flows, and message formats associated with the transactions. Inasmuch as most of these guidelines are quite detailed and technically oriented, this appendix provides only a general overview of the ABA's transaction processing guidelines.

Transactions Supported

Each transaction processed by an on-line, debit card POS system requires the exchange of a pair of messages: either a request and a response,

or an advice and an acknowledgement. A "request" message is used to obtain an authorization decision or a service. Requests may be either approved or declined by the receiver, and may be reversed by the sender, if necessary. An "advice" message is used to notify the receiver of an action or event that has occurred, and it must be accepted. Although receivers cannot decline advice messages, the effect of an advice may be cancelled by the receiver through the use of a return item. (See Section B.6 for a discussion of return items.)

Except for communications between terminal deployers and acquirers, all other transactions in an on-line, debit card POS system require only a single exchange of messages (single-commit protocol). This protocol reduces communication costs by eliminating, for instance, acknowledgement messages between an intermediate network facility and the card issuer.

With respect to cardholders' transactions, the minimum set of transactions that must be supported has been described in Section B.2 of this appendix. The following "system transactions" also must be available in the system:

- File-related messages to review or update cardholders' information maintained by a processor for use in stand-in processing;
- Reconciliation messages that convey system settlement information to acquirers and issuers;
- Administrative messages for handling miscellaneous requirements (such as retrieval requests) and for conveying certain error conditions; and
- Network management messages to request routine network functions and to indicate receipt of advice messages for stand-in.

Message Types

The draft guidelines explain message type identifiers and define which message types are used to process cardholder and system transactions. Message type identifiers include: file processing messages, reversal messages, reconciliation messages, administration messages, and network management messages.

Message Flows

The draft guidelines describe the appropriate message flows among the acquirer, intermediate processors (switches), and the card issuer for each type of message. The guidelines also indicate the required data to be contained in each message, their required format, and appropriate message codes.

B.4 SECURITY

The draft guidelines discuss appropriate security measures to be followed for Personal Identification Numbers, message authentication, key management, and interchange. The guidelines cover mandatory and optional security procedures and the liability for nonobservance.

Personal Identification Numbers

ANSI standard X9.8 provides recommended procedures for PIN generation, assignment, delivery and issuance, and replacement.

The terminal deployer is responsible for providing equipment (i.e., a PIN-pad) and for protecting the processing of the PIN by the terminal and its transmission to the network. The card issuer or its authorized agent is responsible for PIN verification.

The draft guidelines do not address the possibility that PIN verification might occur within the POS terminal (as in the Reading EBT system). Given the amount of detail the guidelines provide on PIN encryption before message transmission through the POS network, it seems unlikely that terminal verification of the PIN would be consistent with the guidelines.

PINs must be encrypted using a Data Encryption Algorithm (DEA) unless they reside in or are being processed by a "physically secure device." A "physically secure device" is a hardware device that has a negligible probability of being successfully penetrated to disclose all or part of any cryptographic key or PIN resident within the device.

A PIN entry device that does not meet the above requirement must meet the following conditions:

- The PIN shall be DEA encrypted;
- Successful penetration of the PIN entry device shall not permit disclosure of any previously entered PIN, even if the encrypted form of that PIN is known; and
- Successful penetration of the PIN entry device which does allow detection of secret information (i.e., PIN or encryption key) shall lead to such physical damage to the device that it cannot be placed back in service without detection.

The PIN must be encrypted using DEA whenever it cannot be physically secured.

Message Authentication

Message authentication provides protection against accidental or deliberate alteration of messages between sending and receiving parties. The draft guidelines state that use of message authentication is optional. If message authentication is used between two parties, however, all messages between the two parties must include message authentication.

During the current review process of the ABA's draft guidelines, some industry groups are arguing that message authentication techniques and technologies are too costly for small-dollar consumer payments, and that they are not worth the trouble. It is expected that the final guidelines will drop this requirement. Presumably this means that if message authentication between two parties is used for large-dollar transactions, it need not be used for all transactions.

If message authentication is not used between the merchant and the acquirer, the acquirer is liable for any financial loss that results from altered messages.

If message authentication is not used between the acquirer and the card issuer, the liability for any financial loss resulting from altered messages rests with the party that decided not to use message authentication.

Message authentication is implemented by using a DEA algorithm to create a Message Authentication Code (MAC). The MAC should be based on the entire content of the message, and it should be transmitted together with the rest of the message. The encryption key used to generate the MAC shall be

shared between the sending and receiving parties. It need not reside in a "physically secure device."

Key Management

PIN Encryption Keys (PEKs) and Message Authentication Keys (MAKs) should be changed periodically, or on a random basis. The keys are sensitive data and should be protected within a "physically secure device."

A unique key must be used between any two facilities. For example, an intermediate network facility (a network switch) must use different keys with every sender and receiver with which it communicates.

Interchange Security Procedures

The draft guidelines provide recommendations covering policies related to:

- Investigative procedures, fees, and reports;
- Recovery of cards and rewards to merchants; and
- Reporting of lost and stolen cards.

With respect to investigative procedures, fees, and reports, each system participant is obligated to provide necessary information to other participants to assist with error resolution. Participants are entitled to reimbursement for actual expenses and for hourly investigative fees. Hourly fees are established by the network's governing rules for the transaction.

A state welfare agency, acting as a card issuer in an EBT system, is likely to encounter situations in which it must request investigative services. If a recipient disputes the amount of an EBT transaction, for instance, the State Agency would have to request supporting documentation about the transaction from the transaction acquirer. The State Agency, therefore, would have to be prepared to reimburse the transaction acquirer for its investigative work. Of course, if the expected investigative fees exceeded the amount in dispute, the State Agency could decide to accept the recipient's claim without further investigation. Some disputes could involve substantial dollar amounts, however, and even for small dollar disputes the agency might decide that the integrity of the program requires the dispute to

be fully investigated. Thus, the State Agency should be prepared to pay investigative fees when investigation is needed.

There seem to be very few instances in which a card issuer needs to respond to an investigative request. The only situation in which this might occur is if, after investigating an error, the transaction acquirer and the State Agency are in disagreement as to who is liable for any losses. This sort of disagreement would go before arbitration (see Section B.7), and the State Agency might have to respond to information requests from the transaction acquirer.

Each acquirer and terminal deployer should use its best efforts to recover a card by reasonable and peaceful means if the acquirer is advised by the issuer to recover a card. Recovered cards should be cut through the embossed account number (without damaging the magnetic stripe). If required by network agreement, the pieces of the recovered card should be returned to the card issuer.

A participant who receives a customer report of a lost or stolen card should promptly notify the card issuer by telephone. The participant also should advise the cardholder to report the lost or stolen card to the card issuer.

B.5 SETTLEMENT

Settlement is the actual exchange of value relating to any transaction processed in a debit card, POS interchange system. The ABA's draft guidelines cover issues related to settlement accounting, reconciliation, transaction dating, and currency conversion. Currency conversion will not be needed for EBT systems in the Food Stamp Program, and this appendix does not discuss it.

Settlement Accounting

The following issues must be agreed upon by all participants in a debit card, POS interchange system:

- Currency of settlement;
- Allowable value dates;
- Settlement entity; and
- Fee collection cycle.

The participant responsible for calculating settlement positions should post value at the settlement entity at prearranged times, based on the accumulation of transaction values for the value date that is being settled.

Clearing accounts may be established at a single clearing bank, multiple clearing banks, or with the Federal Reserve System. The participant responsible for calculating settlement positions must post entries at the clearing bank(s) that will be offset by entries presented by the participant(s) responsible for reconciling the settlement position.

Settlement should occur on any Monday through Friday that is not a holiday observed by all U.S. Federal Reserve Banks.

Fees may be processed either on-line or off-line, on any cycle that is agreeable to all parties. Fees may be netted out of settled transaction values, or they may be paid and collected through separate transactions.

Reconciliation

Prior to participating in a debit card, POS interchange system, all participants must agree on which participant(s) will calculate settlement positions and which participant(s) must reconcile to the calculated settlement positions.

Transaction Dating

To enable correct settlement procedures, each participant must understand and agree to the value date of a transaction. Each participant must accumulate value for settlement processing based upon the established value date.

B.6 ERROR RESOLUTION

All participants in a debit card, POS interchange system must agree on procedures for error resolution. Recommended procedures are provided in the draft guidelines, and these recommendations cover the definition of an error, procedures for error resolution, requests for information and fulfillment, return items, specific return item reason procedures, and arbitration.

Definition of an Error

Recommended error definitions follow those defined in the Federal Reserve Board of Governors Regulation E. Regulation E also discusses error resolution time periods, required notices for the customer, and how long records must be retained.

Procedures for Error Resolution

To resolve an error, a system participant may need access to records maintained by another system participant. All system participants must cooperate in providing needed information for error resolution.

If customers contact either a merchant, the acquirer, or an intermediate network facility about a possible error, these participants must advise the cardholder to contact the card issuer.

If system participants provide incorrect data concerning an error resolution to a card issuer, or if the data are not provided on a timely basis, the card issuer may have rights to recover (through arbitration) certain monetary losses that it suffers as a result of the participant's actions.

Request for Information and Fulfillment

The draft guidelines confirm the card issuer's right to request additional information from system participants. The guidelines provide details on how system participants may fulfill their obligation to provide requested information.

Return Items

By eliminating floor limits and paper settlement, the majority of return items normally associated with credit card processing are not applicable to debit card processing. Anticipated reasons for return items in a debit card, POS interchange system are:

- Disputed transaction amount;
- Credit posted as a debit, or debit posted as a credit;
- Multiple processing;

- Credit not received;
- Fraudulent transaction; and
- Delinquent settlement.

Once a card issuer determines that a transaction was erroneously presented, it may initiate a return item to the acquirer. The return item will serve to correct the error. If the acquirer believes that the original transaction was correct, it may process a second presentment of the transaction. If the issuer believes the second presentment is invalid, it may petition for arbitration.

Specific Return Item Reason Procedures

The draft guidelines provide detailed procedures which are suggested for use by participants when processing return items or second presentments. Separate procedures are given for each reason for processing a return item.

Arbitration

Arbitration is to be handled by review boards established by individual networks. Each network operator should implement procedures for the arbitration and settlement of agreement violations.

B.7 DOWN-TIME PROCEDURES

The draft guidelines discuss the procedures that may be followed and the resulting liability that occurs when transactions are processed while various components of the interchange system are not working. The components are: issuer authorization, PIN-pads, the magnetic stripe data, the POS terminal, the communications system, the cardholder's signature, the transaction receipt, and settlement.

Issuer Authorization

The card issuer must approve an on-line, debit card transaction if it is to be settled. If a component of the interchange network is inoperable or "down", it will be impossible for the issuer or its agent to authorize

transactions. If an acquirer unilaterally decides to complete a transaction under these circumstances, it does so at its own risk.

Pin-Pad Down-Time Procedures

PIN-pads must be provided at the point of sale. If the PIN-pad is inoperable, however, the merchant has the option of allowing the transaction to be entered into interchange. If this option is implemented, the acquirer will be liable for return items under certain conditions.

Magnetic Stripe Down-Time Procedures

If a terminal's card reader is inoperable, merchants may key-enter the embossed account number and, if available, the expiration date from a debit card. The acquirer generally assumes liability for return items when this occurs, even if the PIN is verified by the card issuer. If merchants maintain imprinted receipts, any return items from the card issuer may be remedied by presenting the proper account number and/or the cardholder's identity.

The draft guidelines do not address appropriate procedures to follow if the magnetic stripe on the cardholder's card has been damaged and cannot be read.

Merchant Terminal Down-Time Failure Procedures

If the merchant's terminal is inoperable, the acquirer has the option of allowing the merchant to capture all necessary information (except the PIN) manually for subsequent entry when the terminal is repaired. The acquirer assumes liability if the transaction is not authorized by the card issuer.

Communications Outage Procedures

If the acquirer can capture all necessary information from the terminal but cannot receive authorization from the card issuer due to a communications outage, the acquirer may, at its risk, store the transaction request for subsequent transmission to the issuer.

Signature

Whenever a down time situation occurs, merchants may require cardholders to sign a POS terminal receipt or an imprinted sales slip. Merchants are not responsible, however, for comparing the signature on the card with the signature on the receipt.

Transaction Receipt

The merchant must always provide the cardholder with a receipt of the completed transaction. The merchant should retain a copy of the receipt to accommodate the error resolution procedures of Regulation E.

Settlement

All settlement must be processed as on-line, financial transactions that are approved by the issuer. The only exception is when the acquirer can remedy a return item for an account number that was erroneously key-entered. This is done by submitting to the issuer a copy of the imprinted account number and the cardholder's name.

Appendix C
REGULATION E

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The principal body of federal regulation concerning point-of-sale electronic funds transfer systems is found in the Code of Federal Regulations, Title 12 (Banks and Banking), Chapter II Federal Reserve System, Part 205 (Electronic Fund Transfers), more commonly known as "Regulation E." The fundamental purpose of the regulations is to establish "the basic rights, liabilities, and responsibilities of consumers who use electronic money transfer services and of the financial institutions that offer these services" (Sec. 205.1(b)).

The applicability of Regulation E to an EBT system is unclear, as noted in Chapter 3 of this report. Food stamp benefits are not money and food stamp agencies are not financial institutions in the normal sense of those terms. The USDA Office of the General Counsel ruled in the context of the Reading demonstration that Regulation E did not apply. Nonetheless, the regulation may establish conventional practices to which an EBT system might desire to conform, and it might become applicable to an EBT system that is integrated with a commercial POS system.

Accordingly, this Appendix briefly reviews the main principles in Regulation E that might be applicable in an EBT environment.

Section 205.5 -- Issuance of Access Devices

A financial institution may issue an access device (e.g., card) to a consumer only upon request, or as a renewal of or substitution for an existing access device. Under certain circumstances, unsolicited access devices may be offered.

Section 205.6 -- Liability of Consumer for Unauthorized Transfer

The consumer is liable only if the unauthorized transfer is accessed by an accepted device (e.g., card) that the financial institution has safeguarded to identify the consumer and if the financial institution has provided the following information in writing:

- (1) A summary of the consumer's liability;
- (2) The telephone number and address of the office to be notified in case of unauthorized EFT; and
- (3) The financial institution's business hours.

If all these conditions are met, the consumer is normally liable for at most \$50.

If the consumer fails to notify the financial institution within two business days after learning of loss or theft of the access device, liability increases to at most \$500 or the sum of \$50 and unauthorized transfers that occurred after the two days and prior to notification, whichever is less. Similar liability applies if the consumer fails to notify the institution within 60 days of receiving a periodic statement (required under Section 205.9) documenting unauthorized transfers.

Section 205.7 -- Initial Disclosure of Terms and Conditions

The financial institution is required to disclose in writing a summary of the consumer's rights, the phone number, address, and business hours of the financial institution, and issues of liability, among other information.

Section 205.8 -- Change in terms

If any of the rules outlined under Section 205.7 change, the institution is required to send written notice to each consumer. A statement reminding consumers where to call/write in case of errors or questions about transfers must be sent at least yearly.

Section 205.9 -- Documentation of Transfers

To aid consumers in monitoring their accounts, financial institutions must send them statements summarizing account activity for each monthly (or shorter) cycle in which an electronic fund transfer has occurred. This section also mandates issuance of receipts for transactions at electronic terminals.

Section 205.10 -- Preauthorized Transfer

If a consumer's account is to be credited via EFT by the same payor at least once every 60 days, the financial institution must provide notice of the transaction by one of the following means:

- (1) Oral or written notice within two business days after the transfer; or
- (2) Providing a telephone line which the household could call to ascertain whether or not the transfer had occurred.

Section 205.11 -- Procedures for Resolving Errors

In this section, principles and procedures are established for the definition, notification from consumer, and investigation by the financial institution of any errors that might occur under an EFT system. Procedures to be followed after the financial institution determines that an error has or has not occurred are also outlined.

The key provision of this section is that the financial institution, upon receiving consumer notification of an error, must investigate and respond within 10 days, or respond within 45 days but allow the consumer access to the disputed funds in the interim.

Appendix D
THE PRIVACY ACT

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The Privacy Act of 1974, as amended, establishes principles governing federal agencies (and other entities operating under contract with federal agencies) in the maintenance of records on individuals.¹ The key provisions of the Act are summarized below.

Conditions and Accounting of Certain Disclosures

Any disclosures of the records under an agency's control are restricted to the employees of the agency, law enforcement officials, and other state and federal agencies unless written consent is given by the

with the records and (b) appropriate safeguards to insure the security and confidentiality of the records.

Civil Remedies

Whenever an agency fails to comply with any of the rules outlined in the Act, the individual(s) affected may bring a civil action suit against the agency. If the court determines that the agency acted in a willful manner, the United States shall be liable to the individual for actual damages (at least \$1,000) and legal/court fees.

Criminal Penalties

Any employee of an agency who abuses access to the records maintained by his/her employer may be found guilty of a misdemeanor and fined up to \$5,000.